se will

ertising

ythical

to the S. D.

theme, luce a

ddleton

radio broad-

ver an

tations

present

ries a

prizes

inning-

ons to

ssed.

ontest,

'letter-

at the

special

letters

ed by

s open

also

nillion

roto-

West-

3 part

nd in

oloyes.

ealers

y will

ection.

may

The Newspaper of the Industry

Established 1926. Trade Mark Registered U. S. Patent Office.

Written to Be Read on Arrival

Vol. 27, No. 2, SERIAL No. 529 ISSUED EVERY WEDNESDAY

DETROIT, MICHIGAN, MAY 10, 1939

Copyright, 1939, by Business News Pub. Co.

Commercial Refrigeration Departments

FOUR DOLLARS PER YEAR TWENTY CENTS PER COPY

# Will Not **Sell Appliances** In Chattanooga

Power Board To Stay Out of Merchandising For Year At Least

By Phil B. Redeker

CHATTANOOGA, Tenn. - The Electric Power Board, municipal authority which will succeed the Tennessee Electric Power Co. in the distribution of electric service in Chattanooga when the purchase of the private utility by the TVA is consummated, will not merchandise electrical appliances "at least for a year," declares S. R. Finley, superintendent of the power board.

In view of the fact that the agreement made last week by the Nashville Power Board with the TVA has removed one of the final barriers to the purchase of the Tennessee Electric Power Co. properties by the government agency, this decision may be important as a precedent for other municipal power boards in this

"We are giving the ball to the dealer, and if he does a satisfactory job of building the load and getting appliances to the customers, we'll stay out," Mr. Finley stated.

"If the independent dealers don't do a good job-we're not closing the door all the way to getting into the merchandising field.

We plan to do everything possible to help the dealer do a good job, and we hope they make it by themselves."

There is a possibility, said Mr. Finley, that the Electric Power Board might promote some special new appliances, perhaps room coolers, that the dealers aren't promoting or interested in promoting.

The Power Board will continue the utility company's appliance service department (chiefly on refrigerators) until such time as "other channels (Concluded on Page 2, Column 5)

# Forbes Talk Stirs **Coast Jobbers**

LOS ANGELES-Ways of achieving closer cooperation between manufacturers and jobbers was an important topic of discussion at the semi-annual meeting of the Pacific Coast Refrigeration Jobbers' Association in the Mayfair hotel here.

Principal speech of the meeting was made by John S. Forbes of Superior Valve & Fittings Co., presiof Refrigeration Equipment Manufacturers Association, who told of the organization's spring meeting at French Lick, Ind., and outlined plans for mutual cooperation.

With Mr. Forbes' talk as their keynote, jobbers spent the entire afternoon discussing means of promoting the refrigeration and airconditioning industry, and of achieving closer cooperation between parts manufacturers and jobbers. Regular business meeting of the association was held prior to the luncheon at which Mr. Forbes spoke.

As evidence of their interest in bringing the industry closer together, the entire membership of the West Coast association pledged itself to attend the Second Annual All-Industry Exhibition in Chicago next January, going again, as to the last convention, by special train from California to Chicago.

Convention closed with a banquet in the Gold Room of the Mayfair hotel, which wound up in a debate between Clarence F. (Sandy) Pratt of California Refrigerator Co., San Francisco, and Peter H. Askew, Refrigeration Supplies Distributors, Los Angeles, as to the relative climatic merits of those two cities. Mr. (Concluded on Page 2, Column 2)

From Lighting To Refrigerators



# **Kohnstamm New Sales** Mgr. at Westinghouse

MANSFIELD, Ohio-Appointment of F. R. Kohnstamm as sales manager and L. E. Osborne as manager of manufacturing and engineering has been announced by F. B. Williams, Jr., vice president in charge of the merchandising division of Westinghouse Electric & Mfg. Co.

R. E. Imhoff, former sales manager of the division, has resigned, it was stated.

Mr. Kohnstamm, prior to his present appointment, was manager of the Westinghouse lighting division and agency sales department at Cleveland. He has been associated with the company since 1917.

He came to Mansfield first in 1919, when merchandising headquarters were established there, later becoming assistant sales manager and, in 1931, director of merchandise. In 1933 he went to Pittsburgh as sales promotion manager of the company. Then, in 1934, he took charge of the Cleveland lighting headquarters, where he has since been located. He (Concluded on Page 2, Column 5)

# Servicemen To Meet At All-Industry Exhibition

CHICAGO-Sixth annual convention of the Refrigeration Service Engineers Society will be held next January in Chicago during the week of the Second All-Industry Refrigeration & Air Conditioning Exhibition, according to an announcement made here last week.

With the American Society of Refrigerating Engineers also definitely scheduling their thirty-fifth annual meeting for the week beginning Jan. 15, 1940, the period of the show in Chicago will find these two technical societies for the first time meeting in the same city and at the same time. At the present time there has been no indication of any joint sessions of these two groups.

Attendance at these two conventions is expected to swell greatly the crowds at the Second All-Industry Exhibition. Other industry organizations that will hold meetings during the show include the Refrigeration Equipment Manufacturers Association (Rema), the National Refrigeration Supply Jobbers Association, and regional associations of refrigeration parts jobbers.

Further announcements concerning plans for the All-Industry Exhibition will probably be made sometime later this month, it is understood.

#### **FTC Studying Price** Maintenance Acts

WASHINGTON, D. C .- An investigation of resale price maintenance as practiced under the various state "fair trade" laws, is now being conducted and will be continued in the (Concluded on Page 2, Column 2)

# **Nema Commercial Sales Hit 25,665** Units In March

G-E Combines Air Conditioning and

DETROIT-Fast pace set by the commercial refrigeration industry for the past few months was continued during March, with world shipments by members of National Electrical Manufacturers Association totaling 25,655 units, to bring to 52,766 the total for the first three months of this year.

Commercial shipments in the United States alone amounted to 22,196 units for the month, bringing the first-quarter total to 44,428 units. Sixteen Nema companies reported shipments for March this year, as compared with 14 firms last March.

Sizeable gains in both world and domestic shipments were made over last March in almost all classifications, as well as in total shipments. Nema shipments of commercial equipment only last March amounted to 23,396 units for the world, and 20,647 for the U.S. alone.

Pressure water cooler shipments this year totaled 1,572 units, compared with 1,488 last March, and bottle-type water cooler shipments amounted to 326 units, against 276 in March last year. Ice cream cabinet sales were 4,433 units, as compared with 4,548 last year, while bottled beverage cooler shipments totaled 4,196 units, against 6,867 last March.

Milk cooler shipments totaled 33 units, against 15 in the month last Commercial condensing unit shipments held even with last year's totals, sales this March showing 10,651 units, against 10,590 in March,

For the year's first three months, bottled beverage coolers lead the packaged commercial sales list, with 8,078 units reported. Ice cream cabinets are in second place, with 7,874

#### Stuart Crocker Becomes New Manager

BLOOMFIELD, N. J.-Stuart M. Crocker has been named manager of the newly created air-conditioning and commercial refrigeration department of the General Electric Co. Commercial refrigeration activities, formerly directed from Cleveland as part of the appliance department, will be moved to Bloomfield.

Reason given for the transfer of the company's commercial refrigeration activities to the air-conditioning department was that, as the businesses of air conditioning and commercial refrigeration develop, similarities in both trade practices and product part applications have become more definitely apparent, and the need for closer coordination of the two lines has resulted.

In taking over management of the air-conditioning department, Mr. Crocker succeeds J. J. Donovan, whose resignation was reported in the April 26 issue of the NEWS. His headquarters will be at Bloomfield.

It is Mr. Crocker's first connection with a G-E domestic department, but he has been associated with executive divisions of the company since 1921, when he graduated from Harvard. He has relinquished his duties as assistant to Mr. Wilson to take over the new air-conditioning post, but remains a vice president of Interna-(Concluded on Page 2, Column 1)

### Servicemen's Union In Chattanooga Gets **Labor's Attention**

CHATTANOOGA, Tenn. - What may be a highly significant chapter in the organized labor movement among refrigeration service engineers is the granting of a charter in the International Union of Operating Engineers (A.F. of L. affiliate) to a local organization of service engineers, and the signing of agreements between employers and employes of the two largest service firms in the

Members of the local labor organization declare that the union movement has given them a wedge against other craft unions such as the plumbers and steamfitters, and that henceforth they will not have to stand by and watch the plumbers run their lines for them.

Since they are unionized, the refrigeration service men can work on the same job with the other union men, and do all the refrigerating piping and other work pertaining to the installation.

Organized labor throughout the country is said to be watching with considerable interest this development in Chattanooga.

If the plumbers got mad and went on strike, it is possible that the local Building Trades Labor Council might name the next best fitted craft (in this case the refrigeration service man) to do the plumbing work.

A schedule of labor rates quite satisfactory to the union members was part of the agreement signed. It is understood to provide a \$1.75 top, and a 90¢ per hour minimum. There are four general grades of work, with four different scales, the grades being (1) running copper tubing; (2) doing service work for a customer in the field or in the shop; (3) doing service work on a system still in the guarantee period; (4) working on the owner's equip-

President of the local is J. L. Rehring of Smith Elevator & Mfg. Co., one of the two largest dealer and service concerns who signed the (Concluded on Page 2, Column 5)

# Northern California Sales Continue To Improve; Dayton Dealers Await Public's 'Treasure Hunt'; Birmingham Utility Trains 'Recruit' Salesmen

SAN FRANCISCO-Keeping pace with their 1938 marks, sales of household refrigerators in the San Francisco territory totaled 790 units during March to bring the first-quarter mark to 2,648 units, as comp with 1,677 during the same period of last year.

Electric range sales also rose for the month, with 16 sales reported to bring the year's total to 28 units, against seven last year.

Most other major appliances also showed encouraging gains for the month as compared with the same period of 1938, according to information reported by territorial dealers to Pacific Gas & Electric Co.'s dealer sales promotion department.

Washer sales, for example, amounted to 824 units in March, as compared with 498 in the month last year, and ironer sales rose to 120 units from a March, 1938 total of 92 units. So far this year, washer sales in the territory total 2,011 units, and ironer sales 411 units. This compares with 1,536 and 244 units, respectively, in the same months of 1938.

March radio sales were 4,909 units, compared with 3,839 in the same month last year, and the total for the first quarter was 13,426 units, as against 11,158 in 1938. Vacuum cleaner sales were 4,594 units, against 3,191 last year, and sewing machine sales totaled 566 units, the only appliance to drop below 1938 figures, which were 1,151 units.

DAYTON, Ohio-Dealer members of the Gas & Electric League of Dayton believe that they have developed a "foolproof" method of getting the public to inspect appliheir through the means of a "different" kind of prize drawing contest to be held during Dayton's Automatic Refrigeration Week which started Monday, May 8, and which lasts through May 13.

The league members feel that the plan is foolproof. Here's why: In order to win one of the \$2,000 worth of free prizes, adult citizens of Dayton must match the number on a card they receive with a corresponding number on another card attached to an appliance exhibited in the showroom of a dealer.

The prize winning numbers will be spread around the participating dealers, and only Brooks Harmon, league secretary, will know the prize-winning numbers.

Cards were sent out with an 8page, tabloid-size broadside which carried some articles about the advantages of modern automatic refrigeration, a list of the prizes being offered, advertisements of the various makes, and addresses where they could be bought.

Instructions about the drawing were "buried" more or less inside of the broadside, so that the householders to whom it was sent would have to read through a great deal of (Concluded on Page 2, Column 3)

BIRMINGHAM, Ala.—A training school for electrical appliance salesmen which attracted upwards of 200 registrations was held here April 24 to 27 under the auspices of the Electrical Appliance Dealers Ass tion of Alabama and West Florida. Some 40 dealers, 14 distributors, and two utilities (Alabama Power Co. and Birmingham Electric Co.) participated in the four-day school.

The need for not more salesmen but better trained salesmen led to the holding of the school, according to O. A. Reed, secretary of the association. (J. S. Shaw of Moore-Handley Hardware Co. here is president and B. S. Searcy of Tuscaloosa. Ala., is vice president.) R. P. Mc-David of R. P. McDavid & Co., Birmingham distributor, acted as chairman of the sessions, which were held for a couple of hours each night.

Keynote of the school was struck by Barney DeRamus, residential sales manager of Birmingham Electric Co., who stated that dealers and distributors formerly acted on the theory that "salesmen are born, not made," but had now come to the conclusion that intensive training is necessary, and that salesmen should learn about their merchandise as well as the public's buying motives.

Each person attending the school was given a quiz sheet after each evening's session and requested to check the "true" and "false" statements and hand in the answers the (Concluded on Page 2, Column 4)

### Crocker Will Direct **New G-E Division**

(Concluded from Page 1, Column 5) tional General Electric Co., to which he was elected in 1930.

During the World War Mr. Crocker saw service overseas with the North Sea mine fleet. In 1920, before his graduation, he joined Radio Corp. of America, working in both the traffic and sales departments.

The following year he became assistant to Owen D. Young, when the latter was chairman of the boards of both RCA and General Electric. In 1927 Mr. Crocker was elected vice president and treasurer of United Electric Securities Co., wholly owned G-E subsidiary interested in public utility financing.

He resigned this post in 1930 to become assistant to Clark H. Minor, president of the International General Electric Co., and shortly afterward was elected a vice president of the latter company.

Mr. Crocker has had extended experience abroad, having been closely associated with industrial and financial circles in Europe. In 1924 he was secretary of the American delegation to the experts' conference which culminated in the Dawes Plan, and again in 1928 he was granted leave of absence for service at the Paris reparations conference, which resulted in the Young Plan.

When the latter was concluded, he remained in Europe in charge of various negotiations for both United Electric Securities Co. and International General Electric Co.

#### FTC Will Investigate Price Control Laws

(Concluded from Page 1, Column 3) next fiscal year by the Federal Trade Commission.

A commission resolution calls for investigation of the extent, effects, and methods of the development of resale price maintenance under statutes legalizing it under certain conditions.

It is planned that the investigation shall embrace, among other things: (1) a study of the prices charged by manufacturers and retail dealers for commodities under price contract as compared with such prices for similar competing commodities not under price contract; (2) a study of the quality received by the consumer in his purchase both of commodities under price contract and of similar competing commodities not under price contract; and (3) methods employed in obtaining the support of industry and the retail and wholesale trades for resale price maintenance and in the practical establishment

#### Coast Jobbers Discuss Closer Cooperation

(Concluded from Page 1, Column 1) Forbes, who acted as judge, called the debate a tie, and said that, as far as he was concerned, both cities were perfect.

Next meeting of the association will be held during December at either Los Angeles or San Francisco.

### **Dayton Dealers Try New Promotion Idea**

(Concluded from Page 1, Column 3) the other copy before finding it.

On the back of each of the cards which bore the possible prize-winning number were the names and addresses of the establishments where the prizes would be displayed.

Since only league members were eligible to participate and get their name on the "lucky number" card, the activity has created much interest in the league among non-member dealers, says Mr. Harmon.

Half the cost of this drawing is being borne by distributors for the refrigerators and other appliances represented; half will come out of the league treasury.

#### 'Canned' Radio Programs Prepared By Crosley

CINCINNATI - Crosley dealers will be able to broadcast their own programs over local radio stations for a comparatively small cost using Crosley Corp.'s new series of 13 dramatized 15-minute recorded pro-

Prepared by Crosley Corp. and available through distributors, the entire series of recorded programs is obtainable by dealers for \$20, with an extra small charge for copyright fees on certain musical scores.

The dealer advertises his own company, and adds a short announcement.

April 26, 1938.

Attention: Mr. Anderson

The picture we furnished you

Very truly yours,

AVERY ENGINEERING COMPANY

AVERY ENGINEERING COMPANY

Automatic Products Company,

showed a few of our jobs on which

valves. We have had good service

from these valves and good service from your office and trust that we can continue to do business on

we have used Automatic Products

a mutually satisfactory basis.

Gentlemen:

AND REFRIGERATION

#### Alabama Power Trains 'Novice' Salesmen For Local Distributors

(Concluded from Page 1, Column 4) next day. These question sheets were graded and those successful in passing the tests were given certificates showing that they had completed the course.

At the close of the school, the graduates were asked to indicate the distributor with which they would like to be connected. Each distributor then interviewed the salesmen assigned to it to select or reject the applicants for positions. If a man was rejected by one distributor he was at liberty to seek employment by another.

#### 50 SALESMEN TO BE SELECTED

It was estimated that about 50 salesmen would be selected for positions from the group completing the course. As the request for salesmen came from the dealers and distributors, it was believed that many more would be employed if this trial is successful.

Over 90% of those who sought the sales training were already employed, according to J. S. Sutherland, director of sales for Alabama Power Co. Of this number there were included about 25 refrigerator service men. Dealers and dealer salesmen swelled the number of regular attendants at the school, it was said.

#### INSTRUCTORS PROMINENT MEN

Each evening was devoted to a different phase of appliance selling and the "instructors" were all drawn from men prominent in the appliance selling field in Alabama. In addition to an explanation of the available market for electrical appliances in the state, over 100 modern electrical appliances were shown and demonstrated with special emphasis on the specialty methods of selling employed in each case.

In addition to Mr. Sutherland, speakers on the program were Walter Wann, Jr., Earl Bridges, Gordon Smith, R. P. McDavid, E. G. Walker, W. B. Creech, Gordon Clark, J. R. Lester, B. H. Cooper, Jr., George Nelson, and E. A. Spencer.

Similar schools are planned for Mobile and Montgomery, Ala. in the near future.

#### Carrier District Office Setup Is Revised To Speed Service

SYRACUSE, N. Y. - Revision of the district office organization of Carrier Corp. into seven districts, has been announced by J. I. Lyle, president.

The revision has been made to establish complete engineering, installation, and service organizations close to industry and business. Mr. Lyle said.

Most important change is consolidation of the former Boston district office under the Northeastern district office with Russell T. Tree, head of the New York district, in complete charge of the new set-up. The new district covers New England and Northern Atlantic states. The Boston office is a branch.

A. P. Shanklin of the Syracuse home office has been transferred to his former territory in Philadelphia. Here Mr. Shanklin will have charge of the newly created southeastern district, embracing Philadelphia, all territory south of southern New Jersey and including Florida. The Atlanta office is a branch office.

North Central part of the United States will be under the supervision of the Chicago district, with branch offices in St. Louis and Kansas City. H. G. Strong is the district manager. Cleveland becomes the district headquarters in charge of the East Central states. Branch offices have been established in Cincinnati and Detroit. L. G. Powers, former head of the Cincinnati office, takes charge of the new district office.

South Central and Southwest territory now is covered entirely from the Dallas, Tex. office, with O. W. Bynum as district manager. New Orleans is a branch. The far west will continue to be under the direction of Herbert Peacock of the Los Angeles office, and a branch has been set up in San Francisco.

N. E. Sheldon will continue to manage the district office at Syracuse.

# Chattanooga Service Men Affiliate With Operators

Ca

Strat

tribu

radio

for h

uniti

made St. (

Sti

unit

inclin

Strai

piece

with

feet

surfa

ard

three

other

units

syste

conn

are s

and

kitch in k

mode

rang

plete

sale

when

one :

insta

of ti

whic

floor

plain

into

that

the o

kitch

refri

turer

servi

in w

there

Ch

appli

way

deale

more

peak

ness.

sales

Mr.

for so

furni

Well

deale

that

be su

thing

on th

this

factu

boots

With

Mo

(Concluded from Page 1, Column 5) agreement, the other being Dietz Refrigeration Co.

"We are a completely autonomous division in the Operator's Union," said Mr. Rehring of his refrigeration service engineer organization.

"Yes, we will allow independent service men in the union, but they will probably have to pass some kind of merit test first. We aren't going to let just everyone in."

Will owners of shops be allowed to do service work and become members of the union, he was asked. There are many such shops in the refrigeration business.

That's a problem Mr. Rehring's group hasn't decided fully upon yet, The plumbers do not allow shop owners employing men to do labor themselves.

#### Westinghouse Promotes Kohnstamm & Osborne To Appliance Posts

(Concluded from Page 1, Column 2) will direct sales and advertising activities of the division at Mansfield.

Mr. Osborne has been with Westinghouse since 1910, principally in manufacturing operations. In 1930 he was appointed superintendent of the metal stamping department at East Pittsburgh, then became works manager of the Westinghouse meter and instrument plant at Newark, N. J. Since 1934 he has been located at Springfield, Mass., as works manager for the Westinghouse merchandising division there.

#### Cities With TVA Power Won't Merchandise Appliances—Yet

(Concluded from Page 1, Column 1) are developed to handle this work satisfactorily," said Mr. Finley.

Sales personnel of the private utility, which has merchandised appliances, will be forced to seek employment with dealers.

Arrangements are being completed by the Municipal Power Board to take over the remaining conditional sales contracts on appliances which remain on the company's books.

It is probable that the Power Board will offer the EH & FA plan of financing which was also made available by the private utility.

#### Nashville and TVA To Buy Tennessee Electric Properties

NASHVILLE, Tenn.-Final barrier to the purchase of Tennessee Electric Power Co. properties by Tennessee Valley Authority and several municipalities was removed last week when Nashville agreed to sign a contract for its share in the purchase.

After a three-day conference with TVA officials, the Nashville Power Board announced it had reached "complete agreement" and would sign a contract. Formal transfer of properties will be made June 20.

Price Nashville will pay in the \$78,600,000 deal has been tentatively set at \$14,200,000, while Chattanooga's share is about \$11,000,000 and TVA's cost for power production and transmission lines of Tennessee Electric Power Co. is about \$45,000,

Total price allocations of the cities and associations that have finally agreed to sign for purchase of the system is \$31,625,000. Only \$29,500, 000 was required before consumma tion of the deal could be secured, according to the contract drawn at New York City with representatives of Commonwealth & Southern Corp. holding company of which Tennesse Electric Power is a subsidiary.

Successful Apple Storage demands constant temperatures, and the most accurate of Control Equipment. Too great a fluctuation means loss of quality and appearance. So, for Apple Storage, as well as for all types of Refrigeration and Air Conditioning, A-P Valves are safest.

Supersensitivity to minute temperature differences - plus easy installation, easy adjustment, and leakproof, service-free efficiency-places A-P Thermostatic Expansion Valves in No. 1 choice with the Installing Engineer, Service Engineer — and your customer, the user.

AUTOMATIC PRODUCTS COMPANY Note — Capillary Tubes HIILWAUK<del>f</del>f miscousin

> **Export Department** 100 Varick Street, New York City

REFRIGERATION PARTS JOBBERS WHO RECOGNIZE QUALITY . . STOCK CONTROLS



Modern Apple Storage Plants

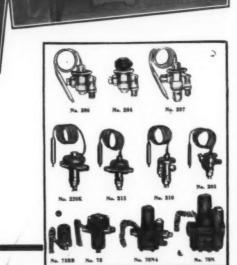
Sensitive to Temperature

Changes. Another reason

for A-P Valve Accuracy.

Sold and Installed by ... Avery Engineering Company

Purchased Through . . . The Harry Alter Co.



EPENDABLE

# Distributor Will Handle Unit Kitchen (abinet Assembly As Another 'Appliance'

By Phil B. Redeker

SAN ANTONIO, Tex.—J. W. Thiele, general sales manager for the Straus-Frank Co., Frigidaire distributor here, has just taken on a radically new kind of "appliance" for his dealers to handle. It is the unitized kitchen (cabinets and sink in a single piece of steel framing) made by the St. Charles Mfg. Co. of St. Charles, Ill.

/ice

in 51

Dietz

mous

nion,"

ration

nden

they

kind

going

red to

mbers

There

efrig.

ring's

yet.

labor

tes

ne

n 2)

tising

sfield

West-

ly in

1930

nt of

nt at

vorks neter

man

wer

n 1)

work

ivate

d to

owei

rrier

ctric

hen

ract

with

wer

ched

sign

rop.

the

vely

tta

,000 tion

00,

ties

ally

the

mared,

rp.,

Strictly speaking, such a kitchen unit is probably not correctly termed an "appliance," but to hear Mr. Thiele's description of how he is planning to sell it, one is rather inclined to agree that it falls pretty much into the major appliance class as a piece of merchandise.

#### A 'PACKAGE' ITEM

"In the first place," says the Straus-Frank executive, "it is a unit piece of equipment. The equipment comes in standard sizes and types, with fronts ranging from 7 to 10 feet long. Sink finish and work surface finish are optional in standard types of finishes. There are three basic colors for the cabinet finish, but the customer can have other colors upon order. The units are equipped with flour sifter and other accessories that have become more or less standard in the kitchen.

"True, the installation will call for the services of an electrician (the units have a built-in diffused lighting system), and a plumber to make the connections for the sink, but these are standard services easily obtained, and for this job, relatively inexpensive. Therefore, I consider it a package item.

#### REPEAT SALES MARKET

"It must be emphasized that this kitchen unit will have a sale primarily in kitchens which already have a modern electric refrigerator and range. It can fit in with a new complete all-electric kitchen plan, of course, but I foresee the greatest sale for it in homes that already have the refrigerator and range—and where the user wants to modernize the balance of his kitchen.

"We are asking our dealers to buy one for their own home, but to delay installing it for quite some period of time—six months perhaps, during which it will be on their showroom floor as a sample. It will be explained that the kitchen unit is going into the dealer's home eventually, but that it is being kept on the floor for the customer's convenience in seeing

#### EASY TO INSTALL

"The dealer may sweat quite a bit in putting the first one of these kitchens in. We feel that after that it will be as simple as putting in a refrigerator or range. The manufacturer is furnishing a very complete service showing how to fit the units in with various floor plans, so that there isn't a great problem or need for study in that phase of it."

Chief reason why this unit kitchen assembly stirred Mr. Thiele's interest was that it gives the dealer another appliance to sell, and, to Mr. Thiele's way of thinking, one of the appliance dealer's problems today is in finding more things to sell.

More things to sell to level out the peaks and valleys of seasonal business, to give a greater gross dollar volume of business, and to give the salesman something more to work on, are the principal reasons why Mr. Thiele is always on the lookout for something new. And that applies to the appliance departments of furniture and department stores as well as the independent appliance dealer, because Mr. Thiele thinks that an "appliance" department will be successful only when operated as a separate department.

#### A COMPANY TRADITION

In being on the lookout for new things to sell, Mr. Thiele is carrying on the tradition of the Straus-Frank Co. More than a half-century old, this concern was originally a manufacturer and wholesaler of saddles and boots, back in the days when cattle was king in Texas and a man was judged by the quality of his boots, his saddle, and his hat. (Even his horse wasn't as important as these items, it is said, and a man with expensive footwear and head-

gear was looked upon with considerable envy.)

The company also furnished some of the accessories and parts for horse carriages. When the automobile came along, the heads of Straus-Frank, unlike so many others in the buggy business, saw that the replacement of the horse by the automobile was inevitable, so they directed their efforts into the automotive field.

From making buggy tops to automobile tops was an easy step, so the company began supplying tops and bumpers, accessories not usually furnished in the early days. This business in the automotive field expanded, so that today the Straus-Frank Co. still is active in that field, being distributor for one of the principal tire companies.

#### 'HAM' DEPARTMENT

When radio came along the astute management jumped into the field quickly, and the company is still in the radio business. Moreover, in the early days it sold transmitter equipment to many of the broadcasting stations in Texas. And today it still maintains a man who devotes most of his time to aiding amateur radio operators ("hams") and selling them equipment.

With the advent of electric refrigeration Straus-Frank was in the game quickly. Then came air conditioning, and today Straus-Frank is one of the best known names in air conditioning in Texas, handling Delco-Frigidaire in San Antonio, and maintaining one of the most complete sales and engineering staffs of any dealer in the country.

Commercial refrigeration machines are an old story to the company, and the Koch line of commercial refrigerators also has been added. Two years ago, in the face of all the natural gas in Texas (where enough gas is burned in waste each day to heat every home in the U. S.) the firm took on electric ranges. And, oh yes—the company sells linoleum too, an item that may be important in its unitized kitchen work.

What's next in the line of merchandise? Mr. Thiele won't venture. He's planning to be pretty busy implanting the unit kitchen idea.

# Westinghouse Sales Up 53% In First Quarter

MANSFIELD, Ohio—Business of the merchandising division of Westinghouse Electric & Mfg. Co. increased 53% in the first three months of 1939 over the corresponding period of 1938, states Frank B. Williams, Jr., vice president.

"Indications are that the upward trend will continue throughout the year, except for a slight summer recession," he said.

#### New Service Dealer

LOS ANGELES—Frank A. Tischer and Harold B. Shomler have opened Electric Refrigerator Parts & Service Co. at 1907 W. Pico St. here.



### **Free Personnel Service**

The individual qualifications of each R.A.C.I. graduate are recorded in convenient form for your inspection. Simply let us know the type of man you need, and we will gladly send you the personnel records of our graduates in your locality who measure up to your requirements.

Yes, you can now eliminate the guesswork in your employment problems—for a new standard of Industrial Training has created a "YEAR-AROUND CRAFTSMAN" to answer your sales, installation, and service problems.

This "YEAR-AROUND CRAFTSMAN" has a thorough knowledge of every phase of heating, ventilating and cooling from the theoretical as well as the practical side. During his laboratory training, he has had

to satisfactorily dismantle, re-build, and balance practically all makes and types of Refrigeration and Air Conditioning equipment—old and new.

More and more distributors, dealers and contractors all over the country are employing R.A.C.I. graduates to insure their profits on installations—and to save on service costs. You, too, can profitably take advantage of the qualifications of this "YEAR-AROUND CRAFTSMAN."

TRAINING IS SUPERVISED BY A MANUFACTURER-APPOINTED COMMITTEE OF ENGINEERS and EXECUTIVES

Refrigeration and Air Conditioning Institute INDUSTRIAL TRAINING CORPORATION

2130-2158 LAWRENCE AVE., CHICAGO, ILL. . In Canada: INDUSTRIAL TRAINING SYSTEMS LTD., TORONTO

# Specialty Selling Ideas

# Distributor 'Sells' Its Users on Submitting Names and Pays Them on a Sliding Scale

ALBANY, N. Y.-Maintaining a sound user clientele and keeping nonselling employes on the look-out for leads through regular "team" contests are two bonus-business producers for Albany Garage Co., Kelvinator distributor.

The company has set up a standard scale of commissions for users, and every owner of a refrigerator (or automobile) purchased from the company knows about it.

Bonus scale for sales up to \$100 retail value is \$2.50; for sales between \$100 and \$250, the rate is \$4; for all sales over this amount, \$5 is paid. All this is done without cost to the salesman, whose regular commission on the sales is in no way affected.

Real tie-up between the company and its users is maintained by requiring all salesmen to make five 'user calls" daily, in addition to regular new-sale calls.

On all such calls, salesmen are instructed to show a real interest in the operation of the customer's appliance-to take off their coats and "get their hands dirty" while making their inspection. This, more than anything else, puts the salesman on

than a million G-E capacitor-motors are

now in use on domestic refrigerators

\*This question was one of several

asked by interviewers in a recent

door-to-door survey. The women

indicated preferences as follows:

31.2% favored General Electric

7.4% favored Manufacturer "A"

6.8% favored Manufacturer "B"

other makes

28.6% favored miscellaneous

26.0% didn't know

a personal basis with the customer. P. D. Mashburn, sales manager, believes.

When sales are made as a result of leads from users, the "pay-off" is made by the individual salesman . . . and in crisp, new currency. Here again the personal contact element is emphasized, and the housewife is more than ever on the look-out for additional leads, which mean more money to her.

Several hundred housewives are not on the company's "outside selling force" through this plan, says Mr. Mashburn.

Sales through employe-leads are bolstered through three contests held annually in the Albany Garage organization, and open only to nonselling workers. In these contests, the staff is divided into six teams, each with its own captain, etc. Girls are selected for this leadership work, Mr. Mashburn says, because they put much more drive into such a campaign than do men.

Great inter-team rivalry is built up during these contests. To the captain of the team turning in the most leads productive of sales, a prize of \$25 is awarded. Second-place

captain gets \$15, and third-place leader \$10. For the individual team members, merchandise prizes are awarded. Sales of \$300, for instance, might earn a shirt, or a hat, or a dress, or a pair of shoes.

Proof that such employe competition actually does build sales is the fact that last year's three contests brought in an extra \$23,000 in business, Mr. Mashburn states.

#### Anatomy Textbook Model For Sales 'Visualizer'

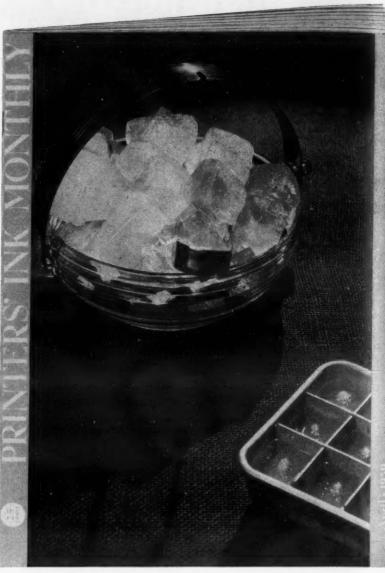
MANSFIELD - Modern streamlined version of the old anatomy charts found in the family medicine book is the "Plus-Value Visualizer." unique visual demonstrator being offered to Westinghouse dealers to help them dramatize the features of the 1939 refrigerator line.

The pages of this giant selling book are so constructed that the particular feature discussed by the salesman is outlined against a "master" picture of the opened refrigerator. When opened to the first page, the super-freezer and adjacent bottle storage space is outlined sharply against a conventionally pictured food compartment.

By turning the page, the glasslike portion of the second page allows the salesman to stress the features of the Meat-Keeper, Humidrawer, and ice cube capacity, as these features are superimposed on the "window" part of the page.

By using this Visualizer, the salesman can tell the prospect a convincing story of the features on the new refrigerators by presenting this

### Symbolizing Electric Refrigeration



Striking in its simplicity, this photograph of a bowl of ice cubes and a tray, used as the cover design for the April issue of Printer's Ink Monthly, symbolizes the conveniences made possible by the household electric refrigerators, and serves as a logical and simple introduction for the issue's lead story, "Electric Refrigeration-the Joe Louis Industry."

#### \$2,500 Sale Results From Small Town Dealer's Cold Canvass Call on Single Farm Home

EDGERTON, Ohio — Example of | the type of farm market to which the Edgerton Hardware Co., General Electric dealer, caters, and which is largely responsible for the increase shown in that company's appliance sales, is cited by C. A. Siebenaler, of the company.

"To one home alone," he said, "in a sale which we developed from a cold canvass call right through to the installation, we sold \$2,500 worth of appliances. This sale consisted of the best and largest electric range, a 12-cu. ft. refrigerator, electric sink, radio, washer, and electric iron. In addition, we installed two electric pumps for the home's private water system, and an ultra modern bath, shower, and lavatory.

#### COST MORE THAN HOUSE

"Cost of this installation exceeded the entire cost of the house, an old country "mansion" more than 65 years old. And, believe it or not, the deal was for spot cash.

"It wasn't easy to get under way. It never is. But once the desire to buy is thoroughly implanted in the prospect, you usually can steer him through to a sizeable

"The profitable \$2,500 sale mentioned, however, was only a begin-Later, electric screens were ordered for use in the fruit sales room, where the presence of flies created a considerable problem. More electric pumps will be installed to supply water for the irrigating system in and around the 50-acre fruit orchard.

"Not only this, but a large cold storage warehouse has been constructed on the farm, a two-story

building with a total capacity of 25,000 bushels. Two four-ton pressure tanks were installed for refrigeration, which is needed to preserve frozen cherries throughout the year and to preserve the apple crop until marketing conditions are most favor-

"Progressive farmers tell us," Mr. Siebenaler continued, "that one of the most satisfactory methods of solving their marketing problems is by the construction of adequate storage facilities, consisting of properly air conditioned or refrigerated rooms, enabling them to hold their products safely until market conditions are such as to insure them a top price.

"Another factor that augurs well for the small town electrical dealer is the increased trend toward home processing of produce for resale, as well as for home use. This is particularly true in fruit farming regions, where orchard owners are salvaging good but unsaleable fruit by converting it into cider, jellies, etc.

"Operating cost," Mr. Siebenaler pointed out, "is one item which looms mighty large to the average farmer. But, strange as it may seem, it is frequently easy to sell him additional appliances to reduce this cost.

"For instance, while a monthly electric bill of \$4 or \$5 may look pretty big to the average farmer, he may realize that by producing additional electrical appliances he can increase his income due to lower electrical rates and greater productive capacity.

"And if he doesn't figure this out for himself, it's up to the dealer to do it for him."

2,228 WOMEN WERE ASKED:

"If you were buying a washing machine, a refrigerator, or an oil burner, what make of electric motor would you like to have on it?"\*

**31.2**% replied, "General"

LMOST one third of these appliance prospects A prefer G-E motors, and so do a great many of your prospects. Why not make your selling job easier by giving them the motor they want? This preference, added to that for your appliance, cuts your selling job in half with these prospective buyers. They are already convinced that your products are dependable—you have only to show them the economy of electric appliances.

G-E motors can also help you sell prospects who have no preference but who are out to buy highquality appliances. The millions of G-E motors now in use have given good service and G-E motors are generally accepted as being reliable.

They increase sales appeal because they are an added indication that the appliances you sell are dependable throughout. General Electric, Schenectady, N. Y.

WHY WOMEN PREFER G-E MOTORS-G-E motors are preferred because they

are built to operate a long time with little or no attention. Note how they

Cast-aluminum rotor-Its one-piece aluminum winding cannot become opencircuited or burn out. Rotor is inherently well-balanced and practically in-

Protected stator - Windings are effectively insulated, are resistant to moisture, oil, and mild acids and alkalis. Metal surfaces are treated to resist rusting.

Long-lived bearings - Ample and sturdy. Equipped with a positive oil-circulating system that supplies clean oil to the bearing surface. Requires only

NEW YORK WORLD'S FAIR - SEE THE G-E "HOUSE OF MAGIC" AT BOTH FAIRS - SAN FRANCISCO EXPOSITION

are built:

GENERAL % ELECTRIC

You can sell more Copelands



because they're priced to sell!

Today's market is price-minded. Copeland's low price means "lower-down-payment and easier terms" and those are magic words! Get the facts about Copeland's extraordinary proposition. Write today!

Copeland Refrigeration Corporation Sidney, Ohio

ing W. C. here "metes saw ticula mone they

the d collect is mad "Of

COL

"Ho

arrang manuf

it come salesma man ar him to

he pays "Whe a due equipm pressing go a months he is in

meter p

such di Bader a instituti Mr. Ba about a right w

are invo Mr. I that if big terr dred squ the job Conse

# Commercial Refrigeration

# Problem of Collecting From Meters Over Wide Area Solved By Express Agents

By Phil B. Redeker

quarters.

ments are made from the head-

quarters in Tulsa, Mr. Bader's trucks

having a commercial license that per-

mits them to truck goods to any place in the U. S. All servicing is

done directly from the Tulsa head-

In his store Mr. Bader keeps a

very complete stock of floor models,

probably one of the largest in this

country. Purpose is to be able to

show the customer any and all types

of equipment he might want to see.

The store is divided by a wall into

two parts; all new models are shown

on the one side of the store, and com-

TULSA, Okla.—As an old hand in the commercial refrigeration business, and an even older hand in sellequipment to food merchants, W. C. Bader of the Bader Supply Co. here saw many advantages in the "meter plan" of selling, but he also saw a lot of disadvantages, particularly in the matter of collecting money out of meters, especially if they are scattered all over hellangone down in this man's country where the wide open spaces are just that.

In fact, he had tried the plan once and had given it up, mainly because of the trouble and cost of "robbing the meters." But there were so many good things about the plan that he kept thinking about it. The matter of finding a convenient and cheap way to collect the money seemed to be the one big obstacle. In the city of Tulsa itself it was all right, because the meters could be set to allow for all collections on a certain day of the month, but this didn't help out in the country.

#### PLAN IS EVOLVED

He decided to talk over the matter with officials of the Allied Store Utilities Co., whose line of Hussmann refrigerators he distributes together with Lipman condensing units, and a plan was evolved which solved the problem, and which is now said to be used by many distributors.

The plan is this. Collections are made by agents of the express company in cities where the express company has an agency (it cannot be applied where only a sub-agency operates, however).

tric

y."

er's

y of

Mr

e of s of

is is

stor-

perly

oms,

well

ner.

hly

ook he

idi-

The express company does not turn the money over to the dealer, but to the manufacturer, since the financial arrangement is worked out with the manufacturer, not the dealer. Hence the dealer has no bother with the collection plan after the installation is made, unless some trouble arises.

"Of course the fundamental idea behind the meter plan is that it is easier for most users to put in a \$1.00 or a \$1.50 a day in a meter than it is for them to get together \$30 or \$45 a month," commented Mr. Bader.

#### COLLECTIONS RUN BEHIND

"However, there's even a more fundamental reason why the meter plan is a good method of getting paid for a job, and that is because the refrigerator and fixture dealer by the very nature of things runs far behind the merchant's other creditors when it comes time to collect.

"The meat salesman, the food salesman, the paper or napkin salesman are dropping in on the food store merchant or restaurant owner every week, and the pressure is always on him to pay these people. Furthermore, they are selling him his stock of goods and the immediate necessities he needs to run his business, so he pays them promptly.

"When the time comes around for a due payment on his refrigeration equipment, he may say to himself, well, I've got other places more pressing for my money, I'll let this go a month, they don't want to repossess.'

Before he knows it a couple months' payments have piled up and he is in a really bad position. The meter plan is pretty good in avoiding such difficulties."

#### LOCAL INSTITUTIONS

In towns where the express company does not have an agency Mr. Bader attempts to have some local institution, usually a bank, take the money out of the meters for him. This is generally fairly expensive, Mr. Bader finds, perhaps costing about a dollar a month, but is all right where fairly large contracts are involved.

Mr. Bader works on the theory that if you're going to operate in a big territory covering several hundred square miles, such as he does,

the job must be done right. Consequently, his salesmen sell direct all over the territory, traveling by car, and talking to prospects wherever they find them. All shippletely hidden on the other side is the used equipment.

"Savings" and "modernization" are the two big sales stories which Mr. Bader pushes. With expensive equipment, the "modernize with quality equipment" has to be the main story, he says.

Mr. Bader also sells butcher supply equipment, such as grinders, cutters, knives, etc., but he keeps it entirely separate. It is a "peddling game," selling item by item for cash, and doesn't mix with the refrigerator

#### Ice Replaced By Machines In 32 CCC Camps

EL PASO, Tex.-Thirty-two camps of the CCC headquarters, district of West Texas and New Mexico, have equipped their walk-in coolers, heretofore chilled by ice, with mechanical refrigeration equipment.

Each of the 8 x 6-foot coolers now uses two 51/2 x 18 x 59-inch "Fed-R-Fin" coils and a %-hp. McCray condensing unit to maintain a working temperature below 40° F.

#### Meat Case Remains Cool **Despite Power Failure**

MANCHESTER, Mich.-Efficiency of modern electric commercial refrigeration equipment was given a thorough test here not long ago when an ice storm broke down the power line supplying electricity to H. A. Hanewald's market.

"When the current failed at 8:45 one Sunday morning," Mr. Hanewald reported, "we had a considerable quantity of meat stored in a Sherer-Gillett meat display case (model C1514) which had been in use for about 16 months.

"To keep the case as cool as possible, I asked my help to be careful not to open the case doors any more than necessary.

"At 7 o'clock Monday morning, with the current still off, the case checked at 36° F. The current came on again at 11:48 Monday night, and the case checked at 44° F. checked our meat Tuesday morning and everything was all right. We didn't lose a single pound of meat."

#### Myron Tucker To Manage New England Concern

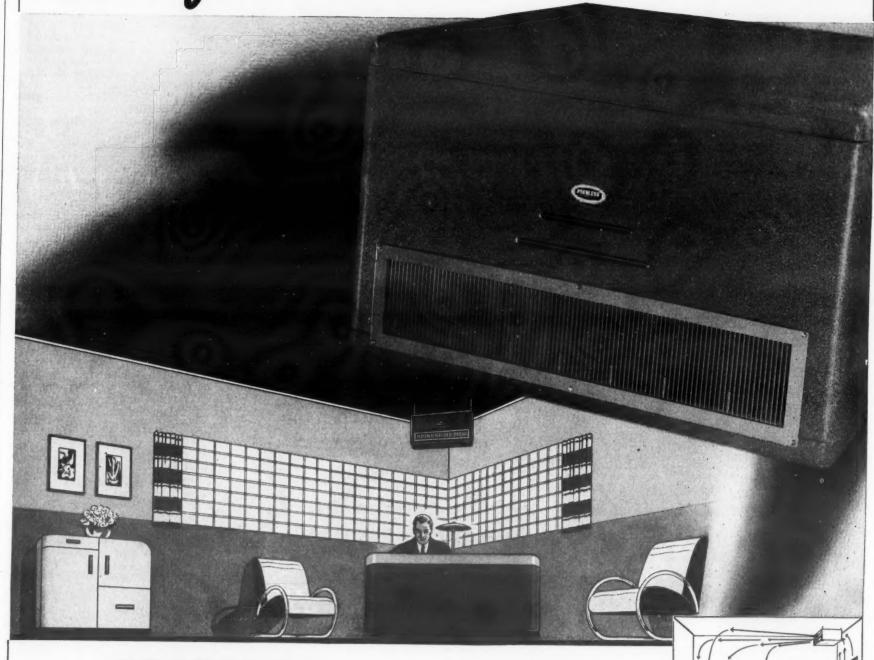
HAVERHILL, Mass. - Myron L. Tucker has been promoted to the position of general manager of Icemaster Co., local manufacturer of refrigerator units. He succeeds Morton R. Milne, who died recently.

Icemaster is opening a general service department to repair all makes of refrigeration machinery in the factory shop. Previously the company had been servicing only its own equipment.

#### Grauman Installs Dole Plates On All Fountain Models

DENVER-After a year's experience using Doleco vacuum plates on its deluxe unit only, the Grauman Co., soda fountain manufacturer here, has extended the equipment to cover its entire 1939 soda fountain line. Grauman is the only soda fountain manufacturer using this equipment exclusively, Dole officials report.

# PEERLESS Comfort CONDITIONER



# FEATURES

- 1. Attractive, Sturdy, Rounded Corner Casing!
- Efficient, Rapid, Heat Transfer!
- Quiet!
- Smooth Air Distribution!
- 5. Pleasing Finish!
- Clean!

- 1. 16 and 18 gauge steel construction. New Peerless Thermek Coil.
  - Centrifugal type Blower Fan.

FACTS

- Long, vertical bar, adjustable grille. 5. Silver-gray, wrinkle varnish baked on.
- Removable filter. (Cleanable filter optional).

There are 5 sizes, with capacity ranges from 1.4 tons to 5.8 tons Direct Expansion, 1.1 tons to 5.6 tons Water Series, based on air entering at 80° dry bulb and 67° wet bulb.

515 W. 35th STREET CHICAGO, ILLINOIS

43-20 34th STREET LONG ISLAND CITY

3000 SOUTH MAIN STREET LOS ANGELES, CALIF.

2218 N. HARWOOD ST. DALLAS, TEXAS

MIDWEST FACTORY NEW YORK FACTORY PACIFIC COAST FACTORY SOUTHWEST FACTORY EXPORT DIVISION P. O. BOX 636 DETROIT, MICH., U.S.A.

·

HOW THE COOL AIR

IS CIRCULATED

# Field Reports

# 'Wholesale Selling' and High Trade-In Allowances Darken Tulsa Sales Picture

#### Tulsa, Okla.

Competition among dealers using the profit-slicing weapons of high trade-in values and near-wholesale prices to nearly every refrigerator buyer has converted the market in Tulsa into one in which a "clean" deal is a rarity; however, this year there are dealers who realize the killing effect of laying themselves open to this wild buyer's market and they have taken a definite stand to make sales bring profits.

#### No Selling Done By Oklahoma Utility

The familiar complaint that a utility company in merchandising competition with dealers in a territory forces dealers into cut-rate tactics cannot be leveled at the Public Service Co. of Oklahoma, for in Tulsa, as elsewhere in the state, utilities are restricted by law from merchandising electrical appliances. Although this is a much desired setup by appliance dealers throughout the country, it is reported that the removal of this utility from the selling field has aided dealers but little.

There is still a lingering doubt in many dealer's minds that a former competitor can hold out a helping hand and mean it, declares Hobart Brown, commercial department, Oklahoma Public Service Co., Tulsa. He stated that their experience has been that it is hard to offer the same measure of cooperation to all dealers —as a result sorespots are frequent. Nevertheless, many forms of cooperation are offered in promotion and in working out displays on the main floor and in the spacious windows of the utility.

#### CAN SELL FROM FLOOR

Dealers are allowed to sell directly from their displays on the floor of the Public Service Co., yet only one dealer has seen fit to keep a salesman-in this case a saleswoman-on hand to take care of the considerable floor traffic.

It is said that this woman does a fine job of turning lookers into

buyers and her company is reported to be well satisfied to tie in with this form of utility cooperation. The failure of other dealers to take advantage of the offer is but one example of the reluctance of dealers to "trust" the offer of cooperative selling aids, says Mr. Brown.

He believes that with such items as roasters and electric kitchens the utility could offer great help to the dealers in promotion. Such initial promotion as is necessary with any new items could best be done by allowing the utility to get out and sell the items, as well as the idea, to prospects, he thinks.

Even in the face of so many problems, Mr. Brown estimated that dealer sales in refrigerators and other appliances were better for the first three months of 1939 than in the same period in 1938. Any increases or decreases in total sales could not, in the face of other factors-namely those causing the dealer to sell without profit in many cases-reflect with any accuracy the position of the appliance dealer here, he added.

"This is a 'wholesale town,'" he explained. "One of the worst. Being a great oil country, the purchasing agents of the large oil concerns and allied operations make their headquarters here and they do purchase a great many supplies from electrical companies.

"In turn, as is usual, I suppose, these companies have retaliated by giving concessions in the purchase of electrical appliances. If the wholesale price was limited to the few officials of the oil and machinery companies, no great harm would have been done. But the practice was extended to the many employes of the companies concerned and as a

#### Jobbers on Pacific Coast Convene



Head table at the banquet which closed the spring meeting of the Pacific Coast Refrigeration Jobbers Association. Around the table (from front) are: L. P. Roth, Refrigeration Service, Inc., Los Angeles; H. A. Halls, Refrigeration Service; Peter H. Askew, Refrigeration Supplies Distributor, Los Angeles; Clarence F. Pratt, California Refrigerator Co., San Francisco; J. S. Forbes, Superior Valve & Fittings Co., president of Refrigera. tion Equipment Manufacturers Association; Jess E. Rauch, California Refrigerator Co.; Frank Gillett, Frank Gillett Co., Los Angeles; Robert Henshaw, Henshaw Supply Co., Sacramento.

result buying at a wholesale price is the rule rather than the exception, it would seem.'

Both distributors and dealers are reported to be guilty of the "whole-saling racket." Retail dealers who wanted a piece of the trade at any price began to offer prices-at a substantial discount—for "company con-nections," with the inevitable result that the buyer can name the business connection and then name the price.

Mr. Brown is of the opinion that the manufacturer is the only one to control this practice. Not only could the wholesale evil be controlled but also the cut-throat competition among dealers in the same brand. He believes that too many dealers in the same brand operating in the same territory-at least that is what happened here-bid against each other with selling price being forced down and trade-in allowances going

By banning wide wholesale selling among distributors and dealers and then limiting the number of dealers in the same territory and controlling the method of selling appliances by "moral suasion," Mr. Brown feels confident that fair profits would again be linked up directly with the volume of sales.

As the situation exists, the salesman as well as the dealer is finding profits extremely lean, he says. Mr. Brown estimated that very few salesmen in Tulsa made over \$150 a month last year and that probably very few would realize that amount per month this year.

#### JUMP AT \$80

"Offer the majority of appliance salesmen \$80 coming in each and every month and he will jump at the chance," said Mr. Brown.

"This is due in part to the situation locally but mostly to the fact that the whole system of merchandising appliances seems to be changing.

"No longer can the salesman be compensated for canvassing for prospects. The time he spends in the hunt for new business gains a poor return, and, as the margin is cut still further by the existing conditions of price slashing, the dealer can hope to make only a slim profit. It is simple arithmetic to arrive at the return he can offer salesmen on any sales he makes-canvassing or otherwise."

Mr. Brown estimated that the retail mail-order stores would this year do some 25% of the refrigerator business in town. These firms are offering a low-price box which remains clear of entangling discounts, he stated, and with a greater number of this year's buyers falling in the low-income class, he predicted that while other dealers, dealers in the major brand refrigerators, were waging a rather unsuccessful battle to meet price demands, the mail-order stores would get large volume-and clean sales.

#### SUGGESTS PRIVATE BRANDS

He stated that he would advise the independent dealer to take on a private brand of refrigerator. Then he believes that he would be able to meet the demand for a lower price box and at the same time gain a bigger discount at added profit per unit sale. In addition, he would not be forced to bid against dealers carrying the same line.

low-priced refrigerators, could take full advantage of the name he built up for his store over a number of years. He would be selling merchandise with his personal guarantee of satisfaction of service. I believe that in view of the fact that the big refrigerator manufacturers have not kept pace with the changing situation of appliance merchandising, have almost forgotten the dealer's chance of profit, that private brand selling is the only salvation. At least, that is the way I see it here in Tulsa."

#### Vandever Will Avoid No-Profit Sales

Stating that they want no part of the cut-rate refrigerator business, the Vandever Dry Goods Co., Westinghouse dealer, has decided to "lay off" refrigerator sales this year with the exception of those sales which can be made with a fair profit result-The sales of refrigerators in this store as a result of the policy were 40% off the 1937 figure last year and for the first three months of 1939 sales were off 50% from the corresponding period in 1938. The appliance department has been instructed to concentrate on gas appliances and electrical items that return profit to the store.

The Vandever management thinks that many local dealers are "killing themselves off" in the price cutting of refrigerators.

"We feel that if we wait them out these dealers will go out of business and some semblance of stability will return to the selling of refrigerators," declared the appliance department manager. "But we are not hopeful, because it may be in the future, as in the past, that the distributor will find another 'sucker' with a little money and another dealer will be born where the last one was killed

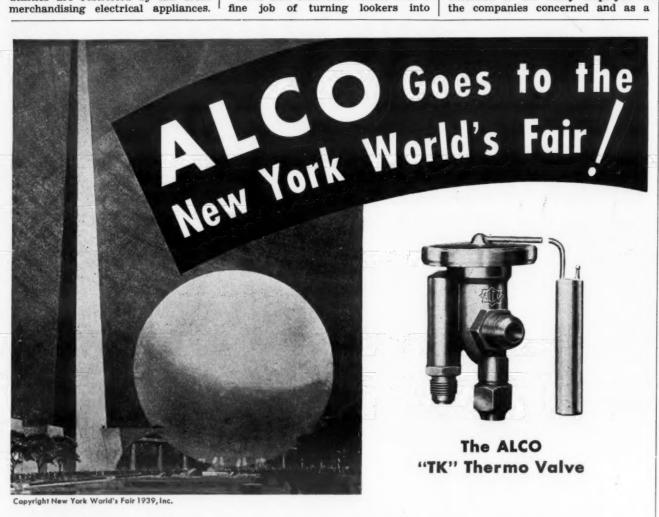
Questioned as to the possible regulation of selling tactics, the manager of this department believed it would be difficult as long as there was a dealer left who put volume ahead of

#### Refrigeration Week' Aids Brown-Dunkin

To combat the many obstacles to profit selling of refrigerators, the Brown-Dunkin Co., department store dealer carrying General Electric and Frigidaire refrigerators, launched a big promotion week on refrigeration, and W. E. Carlton, appliance sales manager, expressed confidence that sales would be considerably aided by the sales plan. Up to the first week in April, about 100 refrigerators were reported sold by this store and another 100 was expected to be sold during the April campaign.

Mr. Carlton stated that the tradein practice in town combined with the prevalence of "wholesaling" made up the major problems of selling. His store, he says, has taken a definite stand against trade-ins and giving wholesale prices to purchasers. For old iceboxes a rate of 50 cents per cubic foot is maintained and the trade on mechanical units is held to 10% of purchase price, it was reported.

"We can sell refrigerators and get (Concluded on Page 7, Column 1)



#### Added recognition of ALCO's leadership in the field of refrigerant control

This year brings new distinction to the Alco line of engineered refrigerant controls—installations in many of the most prominent buildings at the New York World's Fair are equipped with Alco controls. Alco valves are installed in the Theme Center itself, the famous Perisphere, and in many other buildings including the following:

The Administration Building

The United States Government Building

The U.S. Post Office, Press and Promotion Building The Beech Nut Packing Company Building

The Hall of Music

The Public Address Center The Gas Exhibits Building

The H. J. Heinz Exhibit

The World's Fair Headquarters

The Arrowbrook Club Building The U. S. Steel Building

The British Cinema and Bar

The General Motors Building

The Merrie Old England Building

and the Pavilions of the following countries: France, Italy, Switzerland, Poland, Ireland, Belgium, Denmark, Finland and Japan.

In these, and other installations, manufacturers, architects, engineers and contractors specified Alco controls to assure the most efficient operation of their installations. Air conditioning at the New York World's Fair must operate under the most difficult conditions, huge crowds of people, varying loads, provide a severe test of performance.

It is a fitting tribute to Alco design and engineering that Alco valves were selected for so many of the refrigeration and air-conditioning installations in the buildings listed.

Your control problem may not be as complex as a New York World's Fair building, but whatever your requirements in the field of refrigerant control, there is an Alco Valve that will bring the highest efficiency to any evaporator. Alco Valves give accurate, troublefree service throughout their exceptionally long life. Write to Alco for bulletins and information today.

#### ALCO VALVE CO.

2620 Big Bend Bivd.

FOR HIGHEST EVAPORATOR EFFICIENCY

St. Louis, Mo.

ENGINEERED REFRIGERANT CONTROLS

"Then," Mr. Brown continued, "s reputable dealer, if he took on good

objection "Our pulls in treatmen their fr There is to our i We can

cutting

lines h

ing the

elimina

lems.

over th

tors to

many (

Beca

Electric

dropped

man or store s tinue t

"for ou

to cut

present

This

the ma

tributor

prices 1

connect

gave hi

Impro

De

Out o

Electric

all cust

liams st

the serv

ing con ioned a feated t

improve

"We

of stand

we sel

"Ever

of 'peri

spread in on

with the

mendati

a person

rate dr

better 1 When v

"Wher prospect are very good use ice avai good wa are limit to spend merchan "We a town ha dealer to

trade-ins

on the t

erator "As long the dist remedy which fair deal service.

rade-

OF "Auton most of

used mod Wilcox of in conder dealers i disposing

# Good Service & Careful Handling of Trade-Ins Helps 2 Tulsa Outlets

(Concluded from Page 6, Column 5) our price for them, but we do need the aid of the distributor in controlling the other dealers as to price cutting and trade-in allowances," Mr. Carlton said.

"Further, the distributor must control the offering of wholesale prices. The distributor of one of our lines has done just that. By choosing the dealers and offering help as well as control, this distributor has eliminated most of the major prob-

"The result? We have sold his brand of refrigerator three to one over the other make and we are not bothered by 'bargain hunters' and 'wholesale' chiselers. If all distributors took a stand like this a good many of our present troubles would

or,

ert

take

built

r of han-

e of

that frig-

ess,

"lay

with hich

ult-

in

licy last

iths

The in-

pli-

urn

nks

ing

as vill

led

guger uld

he

nd a

Because no salesmen could be found who would not "trade away profit to make a sale," Johnson Electric Co., General Electric dealer, dropped all salesmen this year. There remained no profit for salesman or dealer, the manager of this store stated, and rather than continue to do a refrigerator business "for our health" this store is willing to cut the volume as long as the present situation in Tulsa continues. This dealer calls for regulation by the manufacturer through the distributor. Many examples of steep prices being paid for iceboxes, prospects using the wedge of company connections to effect a discount, and wild competition among most dealers gave his plea an added significance.

# Improved Service Boosts Dealer's Sales 100%

Out of all this dealer grief came an answer to profitable sales from S. B. Williams, auditor of Dodge Electric Co., Norge dealer. That answer is efficient service offered to all customers of this store. Mr. Williams stated that by vastly improving the service department and minimizing complaints this firm has fashioned a sales weapon that has defeated the cut-throat dealer and has improved sales almost 100% over 1938.

"We have realized the importance of standing behind every refrigerator we sell," Mr. Williams declared. "Ever since we instituted our plan of 'perfect service' our users have spread the news and we are cashing in on it by selling new prospects with these users' unqualified recommendations. We use the analogy of a person buying a radio from a cutrate drug store. Sure, they get a better price, but what of service? When we convince the buyer that guaranteed satisfaction through prompt and excellent service is more important than a bargain price, objections vanish.

"Our good name for fair dealing pulls in many prospects and the treatment we give sells them and their friends over and over again. There is another important feature to our improved service department. We can so recondition mechanical trade-ins that we are making a profit on the turnover in used boxes.

"When we are unable to sell a prospect on a new refrigerator we are very often able to sell them a good used box—with our same service available—and this is another good way to win the prospects who are limited in the amount they want to spend, but who do want good merchandise.

"We agree that the situation in town has made it tough for the dealer to realize a profit on refrigerator sales," said Mr. Williams.
"As long as the manufacturer and the distributor refused to offer a remedy we discovered our own, which is comprised of a name for fair dealing backed up by first rate service."

# Trade-Ins Can Be Source Of Profit To Dealers

"Automobile dealers have to make most of their profit out of selling used models," asserted E. H. "Gene" Wilcox of the Wesco office in Tulsa in condemning the practice of some dealers in selling their trade-ins to a used refrigerator exchange or in disposing of them at pitifully low

prices and making no attempt to fix them up.

"There's a good market for used boxes now and smart dealers who will take the trouble to fix up the old jobs are realizing more than the normal margin of profit on tradein sales."

Mr. Wilcox believes that the present-day appliance dealer, unless it is certain that he can do an exceptional year-around job on appliances, should be encouraged to take on other lines of merchandise to round out his business.

"Some more or less all-season or stable line of goods such as floor covering is probably the best bet for the appliance dealer," Mr. Wilcox stated.

It is Mr. Wilcox's belief that local sales promotion is a vital element in sales progress, especially among the larger dealers having a fairly sizeable group of salesmen, for the reason that much of the salesman's effectiveness is dependent upon his "mental state."

The fact that he knows or can be told that a sales promotion plan is being put to work to either get prospects for him or to do part of the sales job spurs him to more selling effort, thinks Mr. Wilcox.

Mr. Wilcox uses many of his own ideas in sales promotion work, and encourages dealers to use their own. His idea is that if a dealer thinks out or works out some plan of his own, no matter how amateurish it may look on paper, it may prove effective by the very fact that the dealer will put a maximum of effort behind the plan, simply because it is his own.

Mr. Wilcox reports that he has found AIR CONDITIONING & REFRIGERATION NEWS very helpful in supplying new ideas on sales and sales promotion, and as an authoritative encyclopedia of appliance industry trends and developments.

To make up this "encyclopedia," Mr. Wilcox has built his own binder

for the copies of the News which he receives, consisting of two boards in which holes have been bored. Copies of the News are punched to provide holes which match the size of those in the boards, and the copies are then inserted between the two boards, which are clamped together with long bolts.

#### Praeger Hardware To Handle Crosley Appliance Line

SAN ANTONIO, Tex.—Praeger Hardware Co. here has been named a Crosley dealer by Alamo Distributing Co., local distributor for Crosley products.

#### **Boyd Furniture Adds Estate**

WAYNESVILLE, N. C. — Boyd Furniture Co. has taken on the Estate line of electric ranges.

#### R. L. Warr Joins Holman

SUMTER, S. C.—R. L. Warr has joined the sales staff of Holman Appliance Co., local Frigidaire dealer.

#### Grieder Electric Named Dealer By G-E

SAN ANTONIO, Tex.—Grieder Electric Appliance Co. has been organized here as dealer in G-E appliances. C. D. Grieder, who for 13 years has been associated with the Public Service Co. here, is head. In addition to household appliances, the firm will handle a complete line of commercial refrigeration.

# Rogers Plumbing Co. Takes On Westinghouse Line

ASHEVILLE, N. C.—Latest addition to the ranks of electrical dealers here is Rogers Plumbing Co., which is now handling the complete Westinghouse line of appliances. Jack Rogers heads the organization.

#### Tyner Named Dealer

PEMBROKE, N. C.—W. H. Tyner Co. has been named Kelvinator dealer in this territory.



# Commercial Refrigeration

# Low Temperature Sections For Walk-In Cooler Made From Household Trade-Ins

OMAHA, Neb.—Trade-in, that problem brat of the refrigerator family, has become a model and valuable child for Sol Lewis, domestic and commercial dealer here, for he uses parts of many of his domestic tradeins to profitable advantage by adapting used mechanical units to power small low-temperature compartments set in walk-in coolers.

These compartments, built to specification, provide a cheap low-temperature box that fills a long-felt need of many store owners, the total cost being around \$125 for a 4-cu. ft. capacity and \$160 for a 6-cu. ft size. As most conventional low-temperature cabinets offered are too large and too expensive, Mr. Lewis said, merchants were facing big losses from highly perishable goods rather than invest a great deal of money in a compartment.

#### SELLING JOB EASY

Comparing food savings through the use of his cooler, and having the added advantage of attractive price makes the job of selling pretty easy, this dealer has found. Many users have reported that they have almost paid for the units in week-to-week savings. And these enthusiastic users have sold others on the idea.

Building his own compartments, Mr. Lewis can comply with any specifications wanted by the particular buyer. Boxes are usually made of wood with a metal lining. The door can be placed according to the needs of the user in his particular walk-in cooler. Many of the compartments are fitted under a shelf in the walk-in in order to conserve on the space needed for other purposes.

The customer can specify the coil wanted. Cost of the ordinary vacuum plate coil averages around \$13.

Some of the coils that are used are salvaged from other jobs Mr. Lewis has on hand, or has taken in trade. Reconditioned units from domestic trade-ins furnish the refrigerating machinery. "Practically everything we use is salvage," says Mr. Lewis.

#### LITTLE INSULATION

As the compartment is placed in the walk-in cooler, having an average temperature of around 36° F., very little insulation is needed to maintain the 10° F. temperature in the small low-temperature box-another saving, points out Mr. Lewis.

The spread between the 36° temperature in the walk-in and the 10° temperature in the smaller box affords an added saving in the operating costs of the small unit. Actual checks on operation have revealed that the total cost for running the unit was less than one dollar a month.

Although these installations usually sell themselves through user stories, Mr. Lewis keeps in close contact with dealers and distributors who sell equipment to store owners and follows up any installation with his proposal to provide the cheap lowtemperature cabinet.

This dealer has another idea on how to utilize domestic trade-ins for profit. When domestic refrigerators are turned in and are too mechanically worn to be turned over at a profit after reconditioning, their units are removed, and the cabinets used for freezer cabinets. Having complete facilities in his service shop for putting these cabinets in shape after the motors are removed, this dealer has realized extra profit from these "cutdown" domestic refrigerators. Both "Monitor Tops" and conventional style boxes are put to this use.

Of course, trade-ins which are in good shape are refinished, mechanical parts checked and repaired, and then put on the sales floor for the prospects who are in search of a cheaper refrigerator having good appearance and mechanical units which are sold with a backed-up promise of efficient

Mr. Lewis believes that reliable service for both used and new boxes is an important part of selling. He finds that customers who buy a used box, are satisfied with its performance, and who can be assured of continued service, are certain to come back to his store when they are in the market for a new model. Buyers of new refrigerators receive the same careful service treatment, and they in turn repay these efforts by recommendations to their friends.

#### SELLING OLD REACH-INS

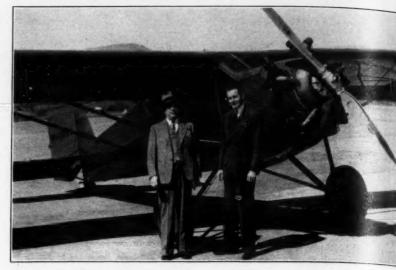
He has also found a good use for old reach-in coolers, fitting them out as dough retarding units for bakeries. The coolers are refinished, the insulation improved, if necessary, and then slots are cut into the walls so that trays can be slid into the cabinets. These slots can be placed according to the specifications furnished by the bakery and are so arranged that the trays can be put in at different heights, as the user

The doors of the cabinet are also arranged to give easy access to the cabinet. All this work is done in the service shop and the cost of making over the old reach-in cooler in this fashion is said to be low enough to allow resale at a moderate price but with a substantial profit.

Canny dealing in trades is not the only source of profit in this store's scheme of things. Water coolers have their best market in large offices because Mr. Lewis has a sale story that is made to order for the business man who is nearly always interested in cutting costs in every possible way.

Soliciting for water cooler business in these large offices, this dealer usually finds that one cooler is made to serve the needs of a huge office force. Workers must take "time out" for a drink, and the lone cooler, placed in the hall or far from the worker's desk, becomes the "social center" as workers line up to quench their thirst.

### Prospects Fly To Display Rooms



George H. Mason (right), "flying salesman" for Grant E. Key, Inc., Bastian-Blessing distributor, gets ready to take C. E. Canada, Roanoke, Va. ice cream man, for a ride-and, he hopes, another sale.

#### Soda Fountain Salesman Flies Prospects To His Showrooms

LYNCHBURG, Va.-"Up in the air" with prospects, but with both feet on the ground when it comes to detailing the merits of his equipment, is George H. Mason, "flying salesman" of soda fountain equipment for Grant E. Key, Inc., distributor for Bastian-Blessing Co.

Prospects like to see the equipment they are buying, Mr. Mason believes-and under his arrangement, even the busiest man can spare the time for a thorough inspection. The "flying salesman" simply bundles his prospects into his plane and takes them either to Lynchburg or to Charlotte, N. C., where Bastian-Blessing's line of soda fountain and low-temperature equipment is on display in the Key salesrooms.

Besides, it's a pleasure trip for the prospect, even if business is transacted. Mr. Mason owns his own Curtiss Robin cabin airplane, and holds the highest license a pilot can obtain. The "flying salesman" is a life member of the "Quiet Birdmen," and has nearly 3,000 flying hours to his credit.

#### Heads Crosley Export

CINCINNATI-O. Bermudez has been named manager of the foreign division of Crosley Corp., succeeding A. G. Lindsay, who is no longer connected with the company.

#### Beverage Coolers Also Find Use In Keeping Your Favorite Dish'--Lobsters, Oysters or Cantaloupes

DETROIT - Out-of-the-ordinary uses to which bottled beverage coolers can profitably be put are listed in a promotion folder recently issued by Kelvinator's commercial sales organization.

Incidentally, the suggested uses may furnish beverage cooler salesmen with a few "bonus tips" as to additional prospects for this type of equipment.

First use suggested is as a utility refrigerator for storing a variety of products. When partially filled with cracked ice, the units also make ideal coolers and dispensing units for fresh fish, oysters, lobsters, and other sea-food, at lower than display case operating costs, it is pointed out.

Many markets also can use the coolers to keep dressed poultry plump and salable by storing it in a cold water bath at night, it is claimed. In the daytime, excess water is drained off, the poultry is kept properly cooled, and displayed ready for sale.

Beverage coolers also provide cold water cooling for cantaloupes and watermelons, the folder states. The water bath keeps the melons cool, preventing spoilage losses and increasing profits.

Instead of packing beer coils in ice, ice water, or brine, many beverage and beer dealers can use a beverage cooler, with automatically controlled circulating cold water, for coil cooling, it is claimed. The coil is submerged in the cooler, where cold water keeps the beer at the proper temperature for serving.

# THE LEAST VOLTAGE DROP AT STARTING WITH SINGLE PHASE Centures TYPE RS REPULSION START INDUCTION MOTOR. DO YOU KNOW-No other type of single phase motor manufactured can compare with the high starting efficiency of the Repulsion Start Induction Single Phase Motor.

By starting efficiency we mean starting torque per ampere of starting current necessary to give 400 per cent of full load torque, or more.

With this type of single phase motor, there is the least voltage drop at starting on long or heavily loaded lines, hence better voltage at the motor terminals and the least

For room coolers and central plants—they match all the requirements of the installation and surroundings.

Fuses which will protect this Century motor while running and carrying its load are usually of ample capacity

In Century Repulsion Start Induction Single Phase Motors you get a motor that has behind it 35 years of proven ability to handle modern refrigeration compressors and other hard to start loads successfully, even where automatic control is necessary.

Specify Century Type RS motors — that are known everywhere—on your next refrigeration Drive.

CENTURY ELECTRIC COMPANY

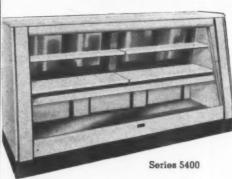
1806 Pine Street St. Louis, Mo.

Offices and Stock Points in Principal Cities

Atlanta • Baltimore • Boston • Buffalo • Chicago • Charlotte • Cincinnati • Cleveland • Dallas Denver • Davenport • Detroit • Houston • Indianapolis • Kalamazoo • Kansas City • Los Angeles • Milwaukee • Minneapolis • New Orleans • New York • Omaha • Philadelphia Pittsburgh • Rochester • Salt Lake City • San Francisco • Spokane • Seattle • Tulsa

ONE OF THE LARGEST EXCLUSIVE MOTOR MANUFACTURERS IN THE WORLD

#### ... AND NOW—THE "All-Display CASE— Full-Vision in its truest sense!



More square feet of Display than any other case.

#### STAINLESS Plus

- STAINLESS STEEL Baffles. Drip Pan, Bottom Deck and inside of lower doors.
- PORCELAIN—All shelves. ends and entire exterior.
- PLATE GLASS-3 light front.

Round corner construction—easy to clean . . . Lights on outside of case at top, and under bottom shelf . . . Counter Extensions available up to 75" in length. Controlled Temperature—Correct Humidity

WRITE FOR COMPLETE CATALOG

GLOEKLER MANUFACTURING COMPANY FACTORY ERIE. PENNSYLVANIA SALES OFFICE 431 FOURTH AVENUE, PITTSBURGH, PENNA



If a comfort-cooling, product-cooling or heavy-duty refrigeration unit is needed as an essential part of equip-ment you make, sell, or use—enlist GR-Lipman specialized engineering knowledge and service-tested units. knowledge and service to yours Add our experience to yours GENERAL REFRIGERATION CORPORATION



to acce "Imper new ey showro The n chromit Beneat sturdy, New practica there is ease W access

that it

importa

of Con

bustion

Engine

being

Comb are all and the features Comp "Imperia

DETR new Me was m Michiga by Lo Schwitz

day con

the mee

air-condi and thr capacity. Both James, I organiza the curre 20% ah proximat which me sold in r

were pre Cummins engineer, experime points of meetings Leroy ing couns dealers a the curre Conven maintaine

Retail Co., Detr Winnin

where des

quet Mor

SEATT ham, for sales capa and cond May 1 t Western Sampsel : Mr. Wir ritory co the Cana Columbia tory of A Conco's ager is wi and cond

Pacific Co

most of h

# Stoker News

#### Combustioneer Imperial Models Are Designed For Eye Appeal

springfield, Ohio-A new line of Combustioneer "Imperial" models is being announced this week by R. C. Goddard, vice president of Combustioneer division of Steel Products Engineering Co. The new models are being made in sizes to cover the popular demand for domestic automatic coal burners.

Designed with trim, flowing lines to accentuate the modern trend, the "Imperial" models are said to have new eye appeal both in the dealer's showroom and in the user's basement. The new models are fitted with chromium trimming and hardware. Beneath the colorful finish is strong, sturdy, rust-resisting steel construc-

Inc.,

nada,

sale.

Bastian-

ain and

on dis-

for the

trans-

is own

ie, and

lot can n" is a

dmen,"

rł

ez has

foreign

ceeding

longe

Your

upes

g it in

, it is

excess

ltry is

played

de cold

. The

s cool,

oils in

bever-

er, for

he coil

where

New design also is said to offer practical advantages. For instance, there is extra foot room at the front of the new hopper, to add to the ease with which it is filled. The access plate has been redesigned so that it is removable by a twist of the wrist. While entirely enclosed, all important parts are easily accessible by the removal of inspection plates. Combustioneer's regular features are all retained in the new models, and the performance appeal of these features will be the basic sales points. Complete Combustioneer line for 1939 includes, in addition to the "Imperial" models, a price-leader hopper model, the bin-feed model, and a wide range of commercial

#### 150 Michigan Dealers View Stokol Lines

DETROIT - Presentation of the new Mercury line of Stokol stokers was made to approximately 150 Michigan dealers for James & Roach by Louis Schwitzer, president, Schwitzer-Cummins Co., at a twoday convention here this week.

Other new products presented at the meetings were a complete new line of Stokol anthracite ash removing stokers, and Stokol-heat winter air-conditioning systems of one, two, and three hundred thousand B.t.u. capacity.

Both Mr. Schwitzer and Norman James, president of the distributing organization, indicated that sales for the current year would run at least 20% ahead of last season. The Michigan organization marketed approximately 1,800 units last year, of which more than one thousand were sold in metropolitan Detroit.

Sales plans for the current year were presented by Walter Sormane, sales manager of the Schwitzer-Cummins Co. John Rowland, chief engineer, and Walter Greenhalgh, experimental engineer, covered fine points of engineering and service at meetings held the second day.

Leroy Kling of Chicago, advertisng counsel for the company, told the dealers about advertising plans for the current year.

Convention headquarters were maintained at Hotel Webster Hall where dealers were guests at a banquet Monday evening.

Retail salesmen for J. L. Hudson Co., Detroit, attended the meetings.

#### Winningham To Head Sales In West For Conco

SEATTLE-Harold W. Winningham, for many years associated in a sales capacity with the Norge heating and conditioning division, resigned May 1 to accept the position of western sales manager for Conco-Sampsel Stoker Corp., Mendota, Ill. Mr. Winningham takes over a territory covering 12 western states, the Canadian provinces of British Columbia and Alberta, and the territory of Alaska.

Conco's new western sales manger is widely known in the heating conditioning industry on the Pacific Coast, where he has spent most of his career in this field.

#### Rarefied Atmosphere In High Elevation Forces Changes In Stokers For Greater Air Volume

TRINIDAD, Colo.—At Trinidad's elevation of 7,100 feet, the atmosphere is 21% lighter than at sea level, and this scientific fact caused considerable extra engineering in the installation of two coal stokers by Shubart & Schloss, Denver, distributor for Link-Belt Co., in cooperation with Truitt & Anderson Plumbing & Heating Co., local Link-Belt stoker

#### 21% MORE VOLUME

The rarified atmosphere made it necessary for 21% more volume of air to be supplied to the stokers in order to secure the normal amount of oxygen for combustion.

Each of the two 100-hp. boilers in the central heating plant is stoked

by a Link-Belt automatic unit. Greater air demand required a large grate area for combustion of the coal, maintenance of high air volume under low velocity, lowering of the ignition rate of the coal, and maintenance of a rate of coal feed sufficient to carry the heat load on the boiler.

To meet the requirements, two special stokers were assembled. The fans from one size of stoker were used to secure adequate air supply; retorts and hopper from another size created the necessary additional grate area; and gear cases from another size effected the low fuel feeding rate necessary for the altitude factor and type of coal.

#### **FUEL SAVING 28%**

Fuel saving for the first season in operation has amounted to 28%, it is claimed. Necessity for burning the stokers down before cleaning called for a special wiring system. The wiring was engineered so that the stokers may operate at the same time or individually, and operate direct from the electrical circuit without a timing device or with one, installation engineers explained.

#### N. Y. School Installs **Anthracite Stokers**

NEW YORK CITY-The first installation of anthracite under-feed stokers of the moving grate type in a New York State school recently has been completed in the Central High school at Vestal.

The heating plant is comprised of three Fitzgibbons boilers, rated for 30,360 sq. ft. of steam radiation, fired by CE-Skelly stokers. In these stokers the coal is advanced by a screw feed from the hopper to the retort, in which it is distributed longitudinally by reciprocating pushers, thus assuring a uniform distribu-tion of the fuel. A lateral movement of alternate grate bars provides a self-cleaning fuel bed. Additional feature of the stokers includes an integral forced-draft fan.

Small sizes of anthracite have long been burned on traveling grate stokers as well as on small stokers of the fire-pot type, but their use on single retort stokers of the moving grate type is recent.

# There's NEW Buy Appeal in This NEW Eye Appeal

IMPERIAL MODEL Combustioneer HAS EVERYTHING TO BOOST SALES

Trailer For Deliveries

& Display Aids Sales

TROY, N. Y.—The old saying about "bringing the mountain to Mohammed" has a counterpart in

modern stoker merchandising as

practiced by James Y. Fowler, Iron

trailer to display his stoker, but he

also delivers every machine sold

through the streets of Troy in this

A sign at the side of the stoker

carries the message that "less than

30 cents per day buys this perfect

servant and guardian of your family's health." Sales so far this

year are considerably ahead of the

corresponding period of 1938.

Mr. Fowler not only uses a small

Fireman dealer here.

Yes, there's new Buy Appeal in the trim lines of this New Imperial Model Combustioneer with its flashing color and chromium decoration. And beneath its modern bonnet there are a dozen features that give dealers everything to boost

sales. Here's a coal burner that's alive with "selling points"-exclusive features that defy competition-quality features that make Combustioneer the Big Value of the year. But get all the detailsmail the coupon today.



#### Localized Selling Plan

Combustioneer is a Pioneer in the industry. We know what it takes to get the orders-and have ready for you new selling helps and a localized advertising plan that will help you get prospects and close sales. And the Combustioneer line, starting with a price leader, gives you a model for every domestic and commercial prospect.

The demonstration of Combustioneer's 3 Famed Features has made remarkable records for helping dealers make sales and profits. No other coal burner can give you the sales advantages of Combustioneer's three exclusive featuresthe Automatic Respirator, the Breathing Fuel Bed and the Patented Transmission.

#### **Profit Plan for Dealers**

Today, Combustioneer offers dealers a new Package Price with controls and a proposition that's built for dealer profit. With its new line, its selling features, its localized cooperation, Combustioneer has a proposition that you should get at once. Mail the coupon and get all the interesting details.

# AUTOMATIC COAL BURNER

#### MAIL THIS TODAY

COMBUSTIONEER DIVISION, The Steel Products Engineering Co., 118 Dakota Avenue, Springfield, Ohio.

Send your new proposition to:

# Profitable Sales Ideas

# '2 Appliances For Price of 1 Refrigerator' Offer Brings Farm Trade To Omaha Dealer

OMAHA, Neb.-Offering a \$69.50 range, radio, or washer absolutely free with the sale of a refrigerator looks like a dead "giveaway," but this plan sold over 600 refrigerators last year for the Paramount Radio General Electric dealer and Leonard distributor here—and it must be profitable, for this same practice is being repeated this year.

This free gift offer holds good only for 1938 model refrigerators, no free offer being made with the purchase of a current model. A purchaser, however, can obtain the free merchandise with the 1939 models by paying an additional \$20 over the list

This dealer carries on an extensive advertising campaign which reaches prospects all over the area. All advertising is centered around the 1938 models. No special make of refrigerator is mentioned in the advertising. Free offers are never mentioned in connection with current models.

Although the free merchandise is advertised as a \$69.50 value—and actually would retail at that pricethe goods are bought in large lots at a cost of around \$39 per unit.

cations.

Refrigerator stock of this dealer consists of about 50% new and 50% old model boxes. Very often, it is said, prospects are "sold up" from an old to a new model.

This form of sales promotion is said to be particularly well adapted to the rural areas which surround Omaha. Advertising in the Omaha World-Herald reaches virtually all over the state. It is estimated that the mail and newspaper advertising of this dealer covers a 450-mile radius. Farmers in this area, it is reported, are very acute to "some-thing free," and many sales are recorded in this rural market.

As convincing proof that the news of such an offer travels far and even wider, this dealer reported that shipment had recently been made to a buyer in the state of Wyoming.

The addition of many REA lines in the rural areas in the last few years has greatly increased the number of prospects in farm homes. An especially attractive part of this farm business is the perfect willingness and ability of the farmers to pay spot cash for their purchases.

As this free offer advertising cam-

paign brings a great many people into the store, the salesmen must be able to take care of a great many prospects. Although the spe-cial offers might be expected to reduce the selling job and make mere "order takers" out of the salesmen, such is not the case. The job of convincing a prospect that the greater bargain is to be had in the newer models, even at the increased price,

Strangely enough, this dealer has no faith at all in "book-made" salesmen. He has found that the particular type of selling done in this store does not adapt itself to "talking in grooves." Salesmen are selected and given a trial without any attempt to school them along any certain lines. A good salesman will quickly learn his own special ways to a prospect's heart, and so to his pocket-The man who finds himself unable to sell in this dealer's setup is out, but it is said that the turnover of salesmen is low.

Every one of the men is on a straight salary. This ranges from \$32 to \$50 a week, according to the length of service and general ability to produce.

The store carries two lines of refrigerators, on the theory that not all persons like the same box, and many come into the store with a certain make in mind, or certain features which may be contained in only one of the lines. As no make of refrigerator is mentioned in the advertising, it has been found that a greater percentage of sales are made by having a two-line variety of models to choose from.

This "gift" method of selling sold 51 refrigerators during one week last

### Salaried Salesmen Can Spend Time In Building Permanent Customers & Boost Sales, Dealer Says

OAKLAND, Calif.—Three or four good salaried salesmen, who work entirely on cultivation of selected fraternal and business groups and follow-up of definite leads obtained from the floor, can do a much better job of appliance selling than a dozen who'd blanket the town, working on a commission basis.

That's the conviction of Scholl and Lerman, which attributes its growth from a sideline to a full-line dealer

Distributors for a line of automobile tires, this company branched out into the appliance business on a small scale about four years ago, and although the location used for the tire business wasn't one designed for drawing any amount of drop-in appliance traffic, this department has been built up to a point where it comprises nearly 50% of the company's business.

#### DEFINITE LEADS

Development of this appliance volume has been due primarily to the efforts of three well-salaried salesmen cultivating fraternal and business groups and working on definite leads, according to Maurice Zatkin, store manager. Dissatisfied with a large staff which split up work to a point where salaries for all of them were not justified and commission money was not at all attractive, the company looked for the flaw in the system.

It found that the men on commission were so anxious to get immediate deals that they wouldn't bother with the "spade work" necessary for building permanent customers. In many cases, their anxiety for immediate sales led to extravagant claims and customer dissatisfaction.

Abandoning the commission plan, the company now retains salaried salesmen, each of whom is assigned to develop business among the employes of certain local factories and other business institutions. Usually, the first contact is made with the department head; then his employes are cultivated a few at a time.

City employes and fraternal groups also are contacted. One man goes after the business of firemen, visiting different firehouses regularly, while another concentrates on policemen. Still another visits various fraternal groups for leads and prospects. Every salesman calls on his own old customers for leads and new business. Being on a salary basis, they can take time to build a foundation of friendship in each case, and let the business build up from each source over a period of months or years. This class of trade, the company finds, is the most desirable.

The rest of the salesman's time is devoted to following up leads obtained from the tire sales floor. As the appliance department is separated from the tire floor only by a low partition covered by a canopy, tire customers are almost certain to notice the appliance line. While waiting for tire service, they will often drift into the appliance department and become interested in one or more

Open account and budget business is encouraged in the tire department, and as the company carries a good share of its own paper, payments are arranged at frequent intervals 80 that tire customers will be brought into the shop frequently and so become acquainted with the appliance line. If the customer repeatedly fails to notice the appliances displayed, they are called to his attention by the salesman.

star

acco

secr

star

the

bers

fact

men

mat

mal

of (

syst

vide

with

tem

by the H.

ann T

engi

"he

ness in a

tion

plan

will

crete

brok

ousl

spac

of .

perio

824

pan

mon

\$1,3

\$1.5

Gi

When the tire customer does go into the appliance department, the salesman carefully notes what appliance he examines most closely and casually questions him on what units he has in his home. This information is noted on a prospect card and follow-up is made at his home or in future floor contacts.

Although a large percentage of the appliance business is done on a credit basis, the company reports that as a result of going after selected classes of reliable customers instead of depending on uncertain drop-in business, the credit loss last year amounted to only \$9.

#### PROFIT ON TRADE-INS

Trade-ins are figured on a profitmaking basis, the company allowing only what it can expect to realize on old equipment. Merchandise too costly to repair is sold "as is"-usually wholesaled. Better units are reconditioned by the company's service men, and sold at a price covering the allowance plus all other expenses. Each salesman carries a list of used appliances, so that he can offer them on contacting prospects who are not interested in new merchandise.

"The important thing in an organization such as ours is to pick and keep versatile men," says Mr. Zat-

"Both sales and service men have to have this quality." And so combination tire and appliance service men play an important part in the operation. If a customer wants a tire repaired, the service truckequipped for handling both appliance and tire service-is sent out. While at the home, the repair man mentions appliances, sometimes makes repairs right then, and always does an effective bit of advertising.

#### Good Door Opener Helps Salesmen

FT. WORTH, Tex.-If a dealer wants to do an outside selling job today he must give his salesmen a door opener, and the door opener must be something that the housewife won't turn up her nose at, says E. White of Fakes & Co., Ft. Worth furniture store which has a separate appliance department.

Last year Mr. White armed his men with a wooden spoon and a cook book for their canvassing expeditions, and got good results. least the men got through a lot of doors with this equipment. Approach was something as follows:

"Madam, I represent Fakes & Co. May I present you with this useful wooden spoon and this cook book for the privilege of inspecting your cook stove?" Once inside, the salesman not only

got complete information on the type and age of the range used, but also took careful note of the existing refrigeration and radio equipment. Appliance salesmen for Fakes &

Co. work on a schedule of being in the store (on the showroom floor) two days, then out three days.

#### Classified Ads Aimed At Specific Income Class Result In Sales

CHEYENNE, Wyo. — By simply "keying in" with the incomes of his prospects, and using only classified section newspaper advertising to reach those prospects, Rudy Tyler, General Electric distributor here, says that he has uncovered a tremendous market for appliances.

Cheyenne's 20,000 population is predominantly composed of railroad employes, who spend a large part of their income improving and modernizing their homes.

Mr. Tyler is furnished with income schedules for every type of railroad worker, from trackmen to engineers, by the Cheyenne Credit Bureau, and, in addition, these salaries are published in a yearly newspaper report.

With this wide open market, Mr. Tyler just composes classified advertisements aimed at specific income classes and sales result. Last year he sold 135 refrigerators, 100 washers, 115 radios, and 75 stokers.

A typical advertisement is: "Conductor's Special-9-cu. ft. refrigerator-\$11 per month."



REFRIGERATING COMMERCIAL

"Beauty is only akin deep" . . . but under the lustrous silver surface of these sensational new Servel units, you'll find a degree of performance, economy and noise-

descriptive



lessness never before available in low-pressure refrigeration. Write today for details. Servel, Inc. Electric Refrigeration and Air Conditioning Div., Evansville, Ind.



FOR MOTOR CONTROL TO MATCH

# air Conditioning

# One-Year Warranty and 60-Day Service Guarantee Adopted In Washington

WASHINGTON, D. C.—One of the forward steps which has been taken by the air-conditioning division of the Merchants & Manufacturers Association here is the adoption of a standard one-year warranty on equipment, and a 60-day service guarantee, according to Perc H. Erisman, Jr., secretary of the association.

lding

Says

s time ads obor. As

a low

ain to e waitl often

rtment r more

usiness

tment.

a good

nts are

als so

rought

so be-

pliance

y fails

played,

ion by

es go

it, the

appli-

y and

t units

forma-

rd and

or in

of the

credit

nat as

elected

nstead

rop-in

profit-

owing ize on

sually

ervice

ering

used

them

e not

rgan

and

Zat-

serv-

rt in

vants

iance

While

men-

akes

does

f his

ified

yler,

nere.

tre-

is

road

t of

nod-

ome

road

ers,

and,

ort

Mr.

ver

ome

100

on-

ra

ES

Mr. Erisman reports that the standard warranty has worked out to the entire satisfaction of all members of the association, and that the 60-day service period has been satisfactory from the customer's standards.

Uniform warranty sheet used by members of the Washington association reads as follows:

#### STANDARD WARRANTIES

Seller agrees to repair or replace, at its option, f.o.b. the place of manufacture, renewal parts for any equipment which proves defective in material or workmanship under normal and proper use within the period of one (1) year from the date the system is ready for operation, provided that said system is installed by the seller, or in strict accordance with instructions given by the seller, and that inspection by the seller establishes the claim and correctness of such defects.

With exception of the 60-day free service period, the buyer shall pay

for any labor involved in repair or replacement of said parts.

Seller shall not be liable for repairs or replacements made by the buyer without its written consent, nor for damages, delays, and losses, consequential or otherwise, caused by defects, its liability being expressly limited to repair or replacement, as stated herein.

#### SERVICE

The seller shall render necessary service for the proper maintenance of the mechanical equipment without charge to the buyer, for a period of 60 days after said equipment is first placed in operation. This service shall not apply to replacement of filters.

Member firms in the Washington association include Griffith-Consumers Co. (Airtemp); Washington Refrigeration Co. (York); United Clay Products Co. (Carrier); A. P. Woodson Co. (Frigidaire); Hudson Air Conditioning Co. (G-E); Combustioneer Corp. (Westinghouse); and United Equipment & Supply Co. (Carbondale-Worthington).

Officers, besides Mr. Erisman, are: Fred H. Hessick, Combustioneer Corp., chairman; and Horace Ashton, Hudson Air Conditioning Corp., vice chairman. The group was organized in July. 1938.

# Carrier Hails Trend To Installations By Local Contractors as 'Healthy Sign' For Industry

SYRACUSE, N. Y.—Installations of engineered air-conditioning systems by local contractors instead of by large manufacturers who supply the equipment was named by Willis H. Carrier, chairman of the board of Carrier Corp., as the "most significant trend in the air-conditioning industry" during 1938, at the recent annual stockholders' meeting.

This change in the industry's former practice of not only developing and supplying equipment, but also of engineering and installing equipment was hailed by Mr. Carrier as a

"healthy sign" for the entire industry.
"This means a portion of the business 'stays at home' and has resulted in an increased interest in air conditioning among the local concerns, now equipped to handle the contracting end of the business," he said.

J. I. Lyle, president, announced

that Mr. Carrier had interrupted work on a new development that will result in material savings and efficiencies in large scale air conditioning, to cooperate with dealers, architects, and consulting engineers in their 1939 programs. Mr. Carrier and other company executives have recently returned from tour of the firm's dealers throughout the country.

"Completion of Mr. Carrier's research on this new development will mark the greatest advance in the air-conditioning field since his design of the centrifugal refrigerating machine," Mr. Lyle said. "It will mean savings and improved efficiency in air-conditioning systems for large office buildings, hotels, and apartments."

He predicted at least a 25% increase in the air-conditioning business in 1939 over 1938.

# Trane Plans Addition; Orders Are Up 42%

LA CROSSE, Wis.—Encouraged by a 42% upturn in orders during the first quarter of the year, directors of The Trane Co. have authorized a second addition to the company's plant here.

Ground for the first addition, which will be of fireproof brick and concrete construction, has just been broken. The two additions, located on opposite sides of the existing plant, will be constructed simultaneously, and will provide approximately a 3313 % increase in available floor space.

Orders received by the company during the first three months of 1939 totaled about \$1,226,156, an increase of 42% over orders for the same period last year and very nearly a new all-time high. Orders for the first quarter of 1938 were only \$826,824. Highest quarter in the company's history was the first three months of 1937, the "boom" quarter for the whole air-conditioning industry, when Trane's orders totaled \$1,368,000.

A regular quarterly dividend of \$1.50 a share on outstanding preferred stock, payable June 1, has been authorized by the directors. The second quarterly dividend for the year of 25 cents on common stock, payable May 15 to stockholders on record May 1, also has been approved.

These figures do not include operations of The Trane Co. of Canada.

# ACMA Publishes Guide To Aid Prospects

WASHINGTON, D. C.—Tempy, Drippy, Dusty, and Stirry—four little cartoon figures personifying temperature, humidity, cleanliness, and air motion (the four elements which must be controlled by a true airconditioning system)—are the principal characters in "The Story of Air Conditioning," told in an educational booklet prepared by Air Conditioning

Manufacturers' Association.
"Personality" sketches of these characters, and a graphic description of their treatment in both summer and winter air-conditioning systems, serve to present the various factors involved in air conditioning in a manner understandable to the layman.

The booklet is intended as a guide to prospective purchasers of air conditioning, so that they may know what to ask for in and expect from the air-conditioning equipment they buy. Copies of the booklet may be obtained from the association.

#### Contractors To Hold 15th Meeting May 31-June 2

CHICAGO—Fiftieth annual convention of the Heating, Piping & Air Conditioning Contractors National Association will be held at the Drake hotel here May 31 through June 2, announces George H. Dickerson, president.



These PAR units are recommended because they take heavy air conditioning loads "in their stride"—with plenty of power and capacity to spare. . . . Offered in four models,  $7\frac{1}{2}$  H.P. to 20 H.P. The 15 to 20 H.P. units each are equipped with dual pumps and dual motors. Control setting for individual operation automatically operates one or both, according to load requirements. . . . All models are rigid and strong and trouble-free—built for long and satisfactory service.

# SEND FOR FREE CATALOG TODAY See PAR UNITS at your nearest Jobber

Akron, Ohio
Percy G. Hanson
Albany, New York
Melchlor, Armstrong,
Dessau Co.
Atlanta, Georgis
Bowen Refrigeration
Supplies, Inc.
Baltimore, Maryland
Melchlor, Armstrong,
Dessau Co.
Birmingham, Alabama
Refrigeration Supplies
Distributor
Boston, Massachusetts
Melchlor, Armstrong,
Dessau Co.
Brooklyn, New York
Melchlor, Armstrong,
Dessau Co.
Brooklyn, New York
Melchlor, Armstrong,
Dessau Co.
Brooklyn, New York
Melchlor, Armstrong,
Dessau Co.
Buffalo, New York
Melchlor, Armstrong,
Dessau Co.
Couffalo, New York
Melchlor, Armstrong,
Dessau Co.
Confalo, New York
Melchlor, Armstrong,
Dessau Co.
Cot, Neal & Company
Cedar Rapids, Iowa
Dennis Refrigeration
Supply Co.
Charleston, West Virginia
Air Conditioning &
Refrig. Sup. Inc.
Charlotte, Morth Carolina
Henry V. Dick & Co.
Chicango, Illinois
H. W. Blythe Co.
Cincinnati, Ohio
Merkel Brothers Co.
Columbia, South Carolina
Henry V. Dick & Co.
Columbas, Ohio
Henry V. Dick & Co.
Columbas, Ohio
Henry V. Dick & Co.
Columbas, Texas
The Electromotive Corp.

Davenport, Iowa
Republic Blectric Co.
Dayton, Ohio
W. H. Klefaber Co.
Denver, Colorado
Refrigeration Parts &
Supply Co.
Detroit, Michigan
W. C. DuComb, Inc.
Young Supply Co.
Des Moines, Iowa
Dennis Refrig. Supply Co.
Flint, Michigan
Shand Radio Specialties
Ft. Worth, Texas
McKinley Refrig. Supply Co.
Greensboro, North Carolina
Home Appliance Service Co.
Harrisburg, Pennsylvania
Melchior, Armstrong,
Dessau Co.
Houston, Texas
D. C. Lingo Co.
Indianapolis, Indiana
F. H. Langsenkamp, Inc.
Jacksonville, Florida
The Jamita Co.
Kansas City, Missouri
Forslund Pump &
Machinery Co.
Lexington, Kentucky
United Service Company
Los Angeles, California
Frank Gillett Co.
Refrigeration Supply Dist.
Lonisville, Kentucky
S. W. H. Supply Co.
Macon, Georgia
Lowe Electric Co.
Madisen, Wisconsin
Refrigeration Specialty Co.
Miwankee, Wisconsin
Refrigeration Specialty Co.
Miwankee, Wisconsin
Refrigeration Specialty Co.

Minneapolis, Minnesota
Refrigeration & Industrial
Supply Co.
Mobile, Alabama
Harris Fixture Co.
Montgomery, Alabama
Teague Hardware Co.
Nashville, Tennessee
The Starr Co.
Newark, New Jersey
Melchior, Armstrong,
Dessau Co.
New York City, New York
Melchior, Armstrong,
Dessau Co.
Norfolk, Virginia
Noland Co.
Oklahoma City, Oklahoma
Mideke Supply Co.
Omaha, Nebraska
Interstate Machinery &
Supply Co.
Peoria, Illinois
R. E. Thompson Co.
Philadelphia, Pennsylvania
Melchior, Armstrong,
Dessau Co.
Phoenix, Arisona
Refrigeration Supply
Distributors
Pittsburgh, Pennsylvania
Melchior, Armstrong,
Dessau Co.
Portland, Oregon
Refrigerative Supply, Inc.
Raleigh, North Carolina
Henry V. Dick & Co.
Richmond, Virginia
A. R. Tiller, Inc.
Bochester, New York
Melchior, Armstrong,
Dessau Co.
Sacramento, California
Hinshaw Supply Co.

San Francisco, California
California Refrigerator Co.
Seattle, Washington
Refrigerative Supply, Inc.
Shraveport, Louisiana
Interstate Electric Co.
Sioux City, Iowa
Dennis Refrig. Supply Co.
South Bend, Indiana
F. H. Langsenkamp, Inc.
Spokane, Washington
Refrigeration Parts Sup. Co.
Springfield, Illinois
Springfield, Refrigeration
Supply Co.
Springfield, Massachusetts
Melchior, Armstrong,
Dessau Co.
St. Louis, Missouri
Brass & Copper Sales Co.
Tampa, Florida
Bowen Refrigeration
Supplies, Inc.
Toledo, Ohio
Heat & Power
Engineering Co.
Tulsa, Okiahoma
Machine, Tool & Supply Co.
Washington, D. C.
Melchior, Armstrong,
Dessau Co.
Waterloo, Iowa
Winterbottom Supply Co.
Wichita Falls, Texas
United Electric Service Co.
Toronto, Ontario, Canada
Railway & Engineering
Specialties, Ltd.
Winnipeg, Manitoba, Canada
Railway & Engineering
Specialties, Ltd.
Winnipeg, Manitoba, Canada
Railway & Engineering
Specialties, Ltd.

EXPORT DEPARTMENT-Melchior, Armstrong, Dessau Co.—New York City, New York

MODERN EQUIPMENT CORPORATION DEFIANCE, OHIO U.S.A.

# AIR CONDITIONING & REFRIGERATION NEWS

Trade Mark registered U. S. Patent Office; Established 1926 and registered as Electric Refrigeration News

Published Every Wednesday by BUSINESS NEWS PUBLISHING CO. 5229 Cass Ave., Detroit, Mich. Telephone Columbia 4242

Subscription Rates
U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$4.00 per year; 2 years for \$7.00. All other foreign countries: \$6.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Send remittance with order.

#### F. M. COCKRELL, Publisher

GEORGE F. TAUBENECK, Editor PHIL B. REDEKER, Managing Editor THEODORE T. QUINN, Assistant Editor Staff Reporters: JAMES MCCALLUM, ALFRED JONES, HENRY KNOWLTON, JR., ROBERT M. PRICE, and JANE LAING

R. T. CARRITHERS, Advertising Mgr. James B. Smith, Asst. Adv. Mgr.

JOHN R. ADAMS, Business Manager ROBERT P. NIXON, Asst. Business Mgr. Lola E. Dew, Subscription Manager

Member, Associated Business Papers Member, Audit Bureau of Circulations

VOL. 27, No. 2, SERIAL No. 529 MAY 10, 1939 Copyright, 1939, Business News Pub. Co.

#### **Private Brands**

ATIONAL sales of household refrigerators are good this season. National statistics show marked improvement in sales over last year. In 1938, Nema manufacturers sold 592,721 household units to U. S. distributors and dealers during the first four months. This year the first four months total is reported to be 800,186. Yet all is not beer and skittles.

Manufacturer, distributor, dealer, salesman—all worry because they feel they aren't getting enough money for their product.

#### Competitive Factors Which Have Pushed Prices Down

Retail prices have been pushed down to the lowest level in the history of the industry this year. This means that profit margins for distributor and dealer are thinner; and that the manufacturer must step up his volume in order to realize a profit.

Two competitive factors are blamed for this situation: the chain stores (Sears-Roebuck and Montgomery Ward) and private brands sold by furniture and department stores. To meet chain store prices, manufacturers this season are offering "stripped" (no gadgets) 6-cu. ft. boxes at comparable prices. The chains have countered by dressing up their refrigerators and installing even more gadgets.

# Chain Stores Profit On Simple Bookkeeping

According to present indications, the chains will continue this year to rank near the top in sales in those localities where they have stores. So long as they use the electric refrigerator as a promotion item; i.e., one on which they can advertise a low price and thus dramatize their stores to increase floor traffic, they will continue to be a problem to the independent dealer.

It should not be inferred that the chains do not realize a profit on their sales of refrigerators. By their system of bookkeeping, they probably do. Refrigerators are shipped directly from factory to local warehouse. Advertising costs are lumped into the general store advertising costs. So are sales costs (they use relatively low-priced salaried employes). The important thing is that the *store* as a whole show a profit; and the dollar volume from refrigerators undoubtedly is a real help toward realizing that end.

# Department Store Accounting Loads Burden on Appliances

Department stores, on the other hand, use quite a different system of bookkeeping. Refrigerators and other appliances not only are expected to pay their own way, but actually must contribute considerable sums to the "management fund" and general store overhead. In baseball parlance, they step up to the plate with at least one strike on them.

As a result, department store accounting often shows that the appliance departments are operated at a loss.

This has led department stores to seek connections with manufacturers who will supply them directly, short-circuiting the distributor, with refrigerators on which they can put their own nameplate.

# Private Brands Advocated At Association Meetings

At recent meetings of the National Retail Dry Goods Association and furniture store groups, private brands have been advocated as a way out of their dilemma. A few experienced voices have been heard "crying in the wilderness" that this will be a costly solution. These voices were those of appliance buyers in some of the largest stores, men who had tried this method in the past.

The joker in the deal, of course, is service. When a department store or a furniture store takes on a private brand, it has to handle service calls through a department of its own, or through a deal with an independent service company. Service on the "national" brands is handled by the distributor.

#### Service Costs Eat Away Longer Profit Margins

Experience of department stores in the larger centers, such as New York, Chicago, Detroit, Philadelphia, and Los Angeles has been that service costs eat away a considerable portion of the extra margin they realize through dealing directly with a factory. Furthermore, they have invariably been disappointed with the volume obtained on an "unknown" make of refrigerator.

Nevertheless, department and furniture stores in many cities are this year trying private brands. Reports from the field show that the prices advertised on these unbranded boxes are about in line with those quoted by the chains. Thus their margin of profit on unbranded merchandise is probably little or no more than that on the well-known makes which they retail at higher prices. And they still haven't learned what their service costs are going to be.

#### When All Figures Are In, Spread Isn't Great

Experienced appliance buyers in Chicago and Detroit insist that within a couple of years these service costs will begin to show up; and that when the returns are all in, the private brand idea may not be viewed with such enthusiasm.

A few stores, such as Detroit's big J. L. Hudson Co., have found

They'll Do It Every Time . . . By Jimmie Hatlo



that private brand refrigerators are useful as a means of "stepping up" price-minded buyers to the well-known lines. In such cases, experience has taught them what costs on a private brand are, and their retail prices are not far under those of the "national" brands.

#### **LETTERS**

#### It May Be Funny But It Doesn't Sell

Miller Metal Products 151 North Haven St., Baltimore Gentlemen:

We noticed in a recent issue of your publication a write-up of a window display by a dealer in Wadesboro, N. C. under the heading "Old Icebox Is 'Ribbed' in Dealer's Unusual Window Display." We think this is very commendable advertising and probably really side-splitting in its humorous appeal. And of course every detail of comparison between the electric refrigerator and the ice box was brought out in its true picture.

I wonder how funny it would strike you if the comparison was the other way around, with "the oldest most dilapidated appearing chemical box that could be found." For some comedy we could add a big tool chest containing plumbers, electricians, pipe fitters, and other tools. Along side could be a 3-inch thick service manual. A really noisy motor would help and with a worn out compressor, a leaky hook-up, and a few other tricks would really make the picture a scream and would no doubt warrant a write up in your publication.

I'm all in favor of the mechanical refrigerator but not of such so-called advertising.

M. M. MILLER, President

Answer: Fifteen years ago they tried to sell electric refrigerators by advertising careless ice men with wet feet. That method didn't get very far. Starting in 1926 the electric refrigerator manufacturers decided to "lay

erator manufacturers decided to "lay off the ice man." The advertisements showed attractive kitchens, beautiful housewives, healthy children, smiling husbands, and appetizing displays of food. Electric refrigerator sales leaped upward immediately.

Ice men saw their customers deserting them. They derided the mechanical-chemical contraption. They denounced it and distributed defamatory literature. Their negative program had no effect on the rising tide of electric refrigeration.

More recently the ice interests have been doing some constructive selling and they are now getting good results. It took them a long time to find out how to sell their product. In the meantime the electric refrig-

In the meantime the electric refrigeration dealers started thinking competitively again. They have been devoting most of their effort to outsmarting each other (mainly by cutting prices).

We think it would be a swell idea for dealers to turn their attention to the job of replacing several million old, small, and cheap units with bigger, better, and more efficient equipment. The commercial refrigeration men are doing it and making good money. In brief, we agree with you, Mr.

In brief, we agree with you, Mr. Miller, that the way to sell a quality product is to advertise, display, and talk about that product and its service, rather than to focus the prospect's attention on a cheap and inferior substitute.

# Polliack & Co. Distributes Norge In South Africa

Norge Division
Borg-Warner Corp.
Detroit, Mich.

Editor:

In a letter which we received from H. Polliack & Co., Johannesburg, under date of April 18 they write as follows:

"We would like to draw your attention to a paragraph which appears in the Air Conditioning & Refrigeration News, March 15, 1939, on page 18, under the title of 'Milk Bars Educating South Africans to Ice Cream, Boost Commercial Units Sales,' and extract of the portion referred to is as follows:

"'As head of Arthur G. Jorgenson (Pty.) Ltd., Mr. Jorgensen is distributor in South Africa for Harold L. Schaefer, Inc., Minneapolis manufacturer of commercial refrigeration cabinets, and for Kelvinator and Norge refrigerators and appliances.'

"We shall be glad if you will cause this to be contradicted in their next issue, as statements of this nature are very disturbing."

Inasmuch as H. Polliack & Co. has

Inasmuch as H. Polliack & Co. has been the exclusive distributors for Norge for years and Mackay Brothers who are a division of Polliack & Co. are distributors for Kelvinator, they are naturally somewhat upset to have it stated that Arthur G. Jorgensen (Pty.) Ltd., are distributors for these products.

We would be very pleased to be able to advise them that you are making a correction in an early issue.

R. W. Gifford,

Export Manager

Answer: Information for this article was supplied by Mr. Jorgensen himself on a visit to the offices of the News. Apparently he took in too much territory.

#### Kelvinator Sold In South Africa By Mackay Bros.

Kelvinator Division of Nash-Kelvinator Corp. 14250 Plymouth Rd., Detroit Export Division Editor:

We refer to the article under the heading "Milk Bars" Educating South Africans to Ice Cream—on page 18 of your issue of March 15, 1939, reading as follows:

"As head of Arthur G. Jorgensen (Pty.) Ltd. Mr. Jorgensen is distributor in South Africa for Harold L. Schaefer, Inc., Minneapolis manufacturer of commercial refrigeration cabinets, and for Kelvinator and Norge refrigerators and appliances."

Apparently your informant has given you the incorrect information as the distribution of Kelvinator equipment throughout the Union of South Africa is under the jurisdiction of Mackay Brothers.

A correction of this statement in

the forthcoming issue will be sincerely appreciated. FRANK CONROY, Asst. Mgr.

Answer: See answer to previous letter.

#### Kelvinator Going Strong In Egypt

The Tractor & Engineering Co. S.A.E. (Incorporating Mosseri, Curiel & Co.) 140, Sharia Emad El Dine Cairo, Egypt

It was with great interest that we read your publication "Around the World With a Candid Camera."

This information review is an interesting one, but we feel we should point out to you certain facts appertaining to this country.

As far as Egypt is concerned, we think it our duty to bring to your notice some mistakes in your article headed "Small Market." For your information, the entries in Egypt for household cabinets during one year are about 900 units—this figure is given by the Customs Administration. You will realize how different this figure is as compared with that published by you.

Moreover, it is not correct that Frigidaire and BTH are holding the Egyptian market—there is in Egypt a severe competition and Kelvinator whom we represent is well established locally. In fact the first electric refrigerator sold in Cairo was a Kelvinator and this was 13 years ago. Ever since public interest in these units has increased. We have constructed in Egypt cold rooms, refrigerators for all uses, equipped coffee houses with the necessary electric refrigerating material, sold freezers, etc.

With regard to air conditioning, we have been the first people to introduce this novelty in Egypt some five years ago, and at present our references for same are very large.

We have brought the contents of this letter to your notice in order that you might alter your facts and be in possession of the true information.

We shall be very glad to read in your next issue the above mentioned amendments, and we are at your disposal for any further information you may require with regard to the Egyptian market.

F. Mosseri

#### Service Men Place Some Orders

Catawissa, Pa., R. D. No. 1

I received your "Master Service Manuals" for Household Refrigeration and was very much impressed with the wealth of information contained in them.

These having proved themselves valuable, I would like also, to have your service manuals for Commercial Refrigeration, so I am enclosing a money order for three dollars (\$3,00) for one of each of the manuals.

ROBERT L. RAUF

433 E. Ellis St. E. Syracuse, N. Y

E. Syracuse, N. Y.
Sirs:
Please find enclosed one dollar
(\$1.00) for the Master Service Manual,

C-2, commercial refrigeration.

The service manual C-3 is interesting so I am going to get all of them if I can.

MICHAEL PISIK

FAI
of 80
up A
curren
sponso
Penn I
Clar
23 sale
Elkins

Cas

by th

organ

15 to

manas

checks

receive

Win

Ter

trict I

third,

manag

Burke

B. L

Nichol

Three

place award

were :

Inc., or distributed tric ref The Roskin Leonard eastern

Alaba

ern Ne

during
Power
Co. are
figures
mitted
salesme
of the
municip
sales co
The
parade

ers, an order no Estim on the leading follows:

produce

Refrigera Radios Ranges Washers Stokers,

Ranges Washers Stokers,

# Distributor - Dealer Doings

# (ash & Bonus Given To Distributors' Men In Leonard's Dealer Coverage Drive

DETROIT—Distributors' wholesale men who were winners in a nationwide dealer coverage drive conducted by the Leonard electric refrigerator organization during the period Jan. 15 to April 1 were announced this week by Ray Legg, general sales

In addition to their regular bonus checks resulting from dealer-building activities, the winning wholesale men received cash awards, Legg said.

Winners in the drive, and their district managers, were as follows: Territory of R. R. Ludington, district manager—First, F. B. Dunford, Buhl Sons Co., Detroit; second, L. J. Bradley, Buhl Sons Co., Detroit; third, R. L. Wilcox, Kemp Equipment Co., Rochester, N. Y.

Territory of B. T. Roe, district manager—First, John F. Burke, J. H. Burke Co., Boston; second, Lawrence B. Leavitt, Ballou, Johnson & Nichols, Inc., Providence, R. I. Three wholesale men tied for third place in this territory, and each was awarded the full third prize. They were E. P. Livermore, H. M. Tower Corp., New Haven, Conn.; W. H.

More, H. M. Tower Corp., New Haven; and Al Barry, Shapiro Sporting Goods Co., Newburgh, N. Y.

Territory of L. W. Klein, district manager—First, C. B. Lawrence, Nunn Electric Co., Lubbock, Tex.; second, L. K. Bray, Nunn Electric Co., Amarillo, Tex.; third, H. G. Kelley, Mullin Furniture Co., Dodge City, Kan.

Territory of Don C. Rulo, district manager—First, George Taylor, Linn & Scruggs Co., Decatur, Ill.; second, R. J. Stewart, J. A. White Co., Grand Rapids, Mich.; third, E. L. Clinker, A. A. Schneiderhahn Co., Des Moines, Iowa.

Territory of Lee Stratton, district manager—First, H. W. Lindohl, Nashville Chair Co., Nashville, Tenn.; second, E. H. Abernathy, Magic City Appliance Co., Birmingham, Ala.; third, W. H. Williamson, Jr., Page-

Williamson, Inc., Charlotte, N. C.
Territory of R. W. Jones, district
manager—First, V. L. Edgar, Graybar Electric Co., Los Angeles; second,
T. G. Burley, Electrical Distributing
Co., Portland, Ore.; third, R. A. Tulp,
Graybar Electric Co., Los Angeles.

# Pageant of Electricity Attracts Chicagoans

CHICAGO—Pageant of electrical progress, a two-week exposition which dramatizes "electrical living" today and tomorrow, is attracting throngs of visitors to the Commonwealth Edison Electric Shop. The show, which is being sponsored by more than fifty electrical appliance manufacturers and other exhibitors, opened May 1 and will continue through May 13.

Cooking schools conducted by prominent home economists, programs on the Novachord, unusual electrical device which is played like a piano and produces tones of several musical instruments, dramatic skits, and special demonstrations are highlights of the exposition.

#### 'Let George Do It'—He Does; Sells 7 Units In Day

ASHEVILLE, N. C.—Literally "all in a day's work" were the six refrigerator sales and one range sale made recently by George Bertram, one of the star salesmen of Reusing's, Inc. here.

#### Watson & Alford Handles Complete G-E Line

KENLY, N. C.—Watson & Alford has expanded its operations and now has a complete electrical department featuring the General Electric line.

#### Calladay To Promote G-E Sales In Chesapeake

BALTIMORE—E. J. Calladay has been appointed sales promotion manager of General Electric Supply Corp. for the entire Chesapeake district, which includes both the Baltimore and Washington branches. Before receiving this appointment, Mr. Calladay was a member of the sales personnel of the Washington branch.

#### Sterchi Bros. Asheville Unit Is Remodeled

ASHEVILLE, N. C.—Local unit of Sterchi Bros. has been completely remodeled, and the store held a grand opening recently. Joe Tallent is manager of the electrical department, which covers almost the entire first floor under the new set-up.

#### Halbert Marsh, Alabama Distributor, Dies

BIRMINGHAM, Ala.—Halbert G. Marsh, 55, president of Clary-Marsh Electric Appliance Co., Universal distributor for Alabama, and widely known in local business circles, died here April 28 of a heart attack.

#### Lake City Co. Adds Ranges

LAKE CITY, S. C.—Lake City Furniture Co., owned and managed by B. W. Moore, has taken on the Monarch line of electric ranges.

# General Refrigeration Adds 8 Distributors

BELOIT, Wis.—Appointment of eight new distributors of Lipman refrigeration and air-conditioning equipment was announced recently by General Refrigeration Corp.

New distributors are: Wickham Supply Co., Lincoln, Neb.; L. E. Mitchell Refrigeration, Grand Rapids, Mich.; North Bay Electric Works, Inc., San Rafael, Calif.; Universal Modernizing Co., Spokane, Wash.; Tennessee Valley Appliances, Inc., Nashville, Tenn.; Henry Bartlett Co., Orlando, Fla.; Charles J. Champieux, Springfield, Mo.; and John J. Mertz, Perryville, Mo.

# Sandhill Maytag Co. Takes On Frigidaire Lines

MT. GILEAD, N. C.—Sandhill Maytag Co., which last year sold around 200 washers and ironers, now has taken on the complete Frigidaire line of appliances. The firm is owned and managed by R. A. McRae. H. C. Foreman, M. W. Harber, and A. J. Thompson are on the sales staff.

#### Charles Fink Opens Shop In Los Angeles

LOS ANGELES—The Mayflower Refrigerator Repair Shop, servicing Grunow, Coldspot, Leonard, Servel, and Norge refrigerators, has been opened here by Charles L. Fink.

# High Mark of 80 Made In 'Spring Circus'

FAIRMONT, W. Va.—High mark of 80 refrigerator sales was chalked up April 20 by salesmen in the current "spring circus" selling drive sponsored by Monongahela West Penn Power Co.

Clarksburg led the territories with 23 sales, with Fairmont reporting 19, Elkins and Morgantown 13 each, Parkersburg six, Panhandle four, and the Southern division two.

#### Roskin Will Distribute Leonard In Boston

per-

this

der

rice

oial a (00) BOSTON — Roskin Distributors, Inc., one of New England's largest distributing concerns, has been appointed to merchandise Leonard electric refrigerators in the Boston area. The company, of which Sam Roskin is president, will represent Leonard in metropolitan Boston, in eastern Massachusetts, and in southern New Hampshire.

#### Alabama Utilities Predict Sales of \$6,286,100

BIRMINGHAM, Ala.—Total residential electrical appliance sales during 1939 on the lines of Alabama Power Co. and Birmingham Electric Co. are estimated at \$6,286,100 in figures recently prepared and submitted to manufacturers, dealers, and salesmen. This does not cover parts of the state served by the TVA or municipal systems. The approximate sales cost is estimated at \$775,000.

The electric refrigerator leads the parade by far as a dollar-volume producer with radios, ranges, washers, and stokers following in the order named.

Estimates of 1939 residential sales on the two utilities' lines on five leading major appliances are as follows:

#### Manchester League Holds Electric Cooking School

MANCHESTER, N. H.—The Manchester Electric Appliance League, composed of the leading dealers of the city, opened a 16 weeks' series of electric cooking schools on Feb. 28.

The demonstrations will be conducted each Tuesday afternoon and evening at the new "All-Electric Kitchen Center" at 1038 Elm St. by nationally prominent home economists. Prizes will be awarded at each session, and grand prizes will be offered every five weeks.

The following appliance firms are cooperating in the plan: E. M. Chase Co., A. L. Franks & Co., Granite State Electric Supply Co., Robert A. Horace, Manchester Coal & Ice Co., Manchester Supply Co., J. J. Moreau & Son, Public Service Co. of New Hampshire, G. F. St. Lawrence & Son, Sears, Roebuck & Co., and John B. Varick Co.

#### St. Clair Radio Service Moves To New Location

CHATHAM, Ont., Canada—St. Clair Radio Service, Leonard dealer here, has moved to a new location at 67 St. Clair St. William Jordan is owner of the company.

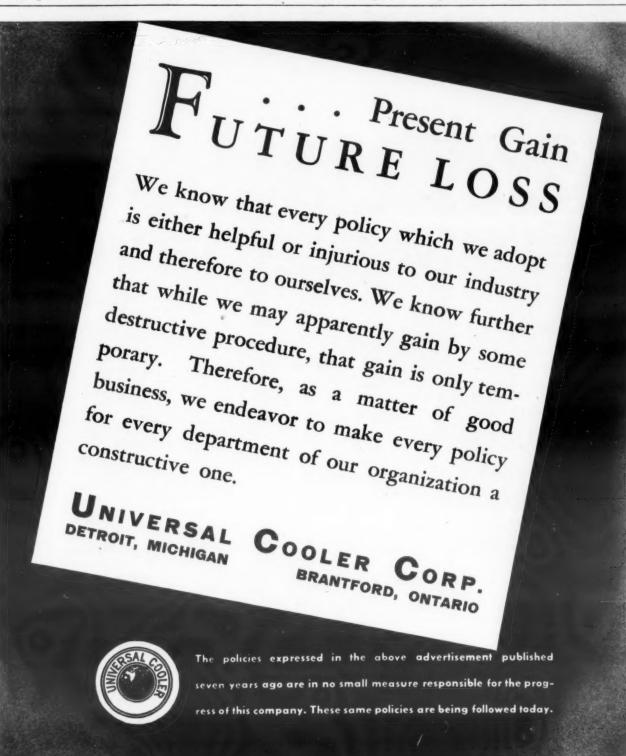
#### New Service Shop Opened In Los Angeles Area

LOS ANGELES—The Los Angeles Refrigerator Maintenance Co., service company, has been opened recently at 4145 Monroe St. in this city by Don Keene, owner.

#### Tweed Takes on G-E

HOT SPRINGS, N. C.—The J. B. Tweed Cash Store here has been appointed General Electric dealer for this district.

| * * *         | Alabam | a Power Co. | Birmingham I | llectric Co. |
|---------------|--------|-------------|--------------|--------------|
| Appliance     | Units  | Volume      | Units        | Volume       |
| Refrigerators | 8,350  | \$1,250,500 | 5,200        | \$910,000    |
|               | 20,000 | 800,000     | 12,100       | 605,000      |
| langes        | 4,500  | 450,000     | 1,500        | 232,500      |
| washers       | 3,250  | 210,000     | 3,350        | 251,250      |
| dokers, etc.  | 250    | 65,000      | 450          | 112,500      |
| 2016          |        |             |              |              |



# The Preferred Methyl Chloride for Service Work

Dependable High Purity

and Dryness



Prompt Shipments Coastto-Coast-Distribution



Helpful
Technical
Service
always
available





E. I. DU PONT DE NEMOURS & CO., INC.
The R. & H. Chemicals Dept.
Wilmington. Delawate
District Sales Offices. Baltimare, Bastan. Charlotte, Chicago.
Cleveland, Kansas City, Newark, New York, Philadelphis
Pittsburgh, San Francisco

# Commercial Field Surveys

# Commercial Dealers In the Southwest Go Into the 'Wide Open Spaces' For Business & Use Some Novel 'Specialty Selling' Ideas

By Phil B. Redeker and Robert M. Price

Editor's Note: In these surveys of commercial refrigeration sales activity in various parts of the country the staff members have attempted not only to provide a picture of how business has been thus far this year, but also to describe some of the new or unusual applications of commercial refrigeration that seem to be opening up; to outline some of the specialty selling methods that are being used to advantage in commercial refrigeration work; and to discuss some of the engineering and installation ideas that were brought to light in interviews with dealers.

#### Tulsa, Okla.

Tulsa calls itself the "oil capital of the world," but don't go there expecting to see oil wells, because there aren't any oil fields in the immediate vicinity. What the term "oil capital" really means is that several of the major oil companies have their headquarters in Tulsa, and there are also some refiner is in the town.

During the past two decades Tulsa has had a "boom town" growth which has leveled out in the past couple of years. Consequently the commercial refrigeration business in the city of Tulsa itself has devolved pretty well into the replacement category, and dealers are working

intensely in the smaller towns in the surrounding area.

#### Bader Helped Revive Coin Meter Plan

W. C. Bader of the Bader Supply Co. which handles the General Refrigeration Co.'s line of commercial refrigerating machines, and the Hussmann and Tyler lines of commercial refrigerators, is a "pioneer" in more ways than one. He is a "pioneer" resident of Tulsa, having come to the town shortly after the turn of the century, when the population was about 3,000.

He was a pioneer dealer in this territory in butcher supplies (1919), and in refrigeration (1931).

More recently he has pioneered use of coin meters in out-of-city territories, meeting the hitherto expensive stumbling block of collections by having that job done by the express company agent, or some other agency in the small town. (See story on page 5.)

In selling commercial refrigeration equipment Mr. Bader employs two main "sales themes."

(1) New equipment is so much less expensive to operate. Mr. Bader has data which shows that two pieces of new refrigeration equipment can be operated as cheaply as one old piece. This is not only convincing, but sometimes leads to the sale of more equipment.

(2) A "modernize to survive" story. Lots of stores and cafes, even in a growing city like Tulsa, have started up and failed even though some of them may have stayed in business some time. Mr. Bader believes that failure to have a "modern" store as far as equipment is concerned causes many such failures, and has built his story around that idea, showing the success of stores that have gone modern.

Mr. Bader thinks that the only thing that is hurting the commercial business now is a tendency on the part of manufacturers to appoint "fly-by-night" dealers, who are out of the business almost as soon as they are in it, but who prove harmful because they cut prices to get business, and who ultimately injure the manufacturer by failing to install and service his equipment properly.

#### Impressive User List Helps O'Bannon Sell

One of the best known names in commercial refrigeration in the southwest, the O'Bannon company handles the Mills line of condensing units and the Koch commercial refrigerators.

While admitting that business could be better (he thinks the cooked-up war scare has made money tight), M. E. "Mickey" O'Bannon is not complaining too much, because his aggressive sales methods have made him a leading dealer for the lines he carries. His carefully computed mimeographed lists of users (which he makes good use of in selling) might make a household refrigerator dealer envious of their number.

His plan of operation is detailed elsewhere in the NEWS, but some of his ideas are worth tabulating here again.

(1) Get salesmen who can tell the "profit" story convincingly, even if they don't know much about refrigeration.

(2) Use the meter plan as a "life saver" in cases where a repossession looks inevitable. Repossessions should always be avoided whenever possible, because nothing is gained from them, and they make enemies.

# Contacts With Institution Officials Profits Carr

Commercial refrigeration department of the Westinghouse Electric Supply Co. in Tulsa is under the direction of Leonard Carr. He wasn't

in at the time of our call, but others in the company said that Mr. Carr had been finding success in specializing in the sale of equipment to schools and other establishments in what is generally known as the "institutional" market.

Mr. Carr, it is said, makes a point of using some of his spare time to become well acquainted with officials of institutions who may be prospects for refrigeration equipment, even though they might not currently be in the market. Such contacts have apparently paid real dividends when the institutions are ready to buy.

#### Dallas, Texas

Mercantile distributing center of the Southwest for many years, Dallas is a city of people who are engaged for the most part in some form of merchandise handling—selling, clerical, and shipping workers.

Both city and residential districts of the town are prosperous looking, although of late Dallas has seen its position as a distributing center challenged by several other cities in the Southwest, which have grown rapidly of late.

Commercial refrigeration business has been just so-so this spring, according to reports obtained. Not that it was bad, but it hasn't been as good as expected. Several sources reported the same thing—that January and February had been exceedingly good, but that something of a drop-off had been experienced during March. U. C. Boyles, veteran Dallas refrigeration supply jobber, and C. A. Schmidt of the Fedders branch in Dallas corroborated these reports, but both said that a definite pick-up had been shown in the second week of April.

Another factor cited by a number of the business men visited was what is called a "time lag" in business conditions in Texas as compared with those generally prevalent in other sections of the country. It is asserted that when conditions are bad in other parts of the U. S., Texas doesn't feel the effect of this condition for about a year, and is also about a year behind in picking up the upward swing of the cycle.

# Hoppe Explains Texans' Distaste For Draft Beer

From Joe Hoppe, who heads up the Frigidaire commercial dealership which bears his name, we got the lowdown on the beer cooling business in Texas, some angles of which had puzzled us ever since we hit the state.

"Nawtheners" who like their beer will discover some rather strange customs and habits when they set out to do some elbow bending and pretzel gnawing in Texas.

In the first place draft beer, while legal, is not readily available, except in hotels and higher class bars.

Bottled beer is served to you at about 30° F., and the glass you get is nicely frosted. (If you don't watch out, there is likely to be a chunk of ice in the glass, a force-of-habit carryover from putting ice in all soft drinks.) At this temperature you may find the taste of your favorite cereal beverage slightly distorted, but the Texans seem to prefer it that way. They have a good point in the fact that the beer will warm up pretty fast most any-

time of the year in the nice warm climate of the Lone Star state.

There are several reasons as explained by Mr. Hoppe, for the apathy towards draft beer, which most experts on the subject seem to prefer over the bottled variety. It seems that when beer was first made legal in Texas, a lot of junky equipment was installed, equipment which turned out dirty, wild beer, which soon disgusted the customers and dispensers. Furthermore, the Texans, used to teeth-chilling soft drinks. wanted their beer that way too, and since most of the equipment was either cooled by ice or the old-style water bath in a novelty box, the customers got their beer at about 45° F., when they wanted it at freezing or lower.

mo

eco

sell

say

cool

tim

tion

equi

firm

thro

amo

\$100

latio

cond

Sout

Bock

Bu

Kı

trad

(son

stan

refri

Distr

Frie

McC

Sout

case

about

while

Janu

been

exam

and 1

good,

been

thing

think

that c

opera

replac

bringi Dealer lem i

price

used i

Beli

reside

Detro

north

Anton

Not

up eve

pourin

nearly

Cons

try, w

growin all bu

the po buy fe than th

their

conside

crop in

'too

"C

Mo

Another factor in the cooling problem was the lack of basements (which just aren't generally built in Texas construction) in which to put the keg pre-cooler.

As a result of all these factors, draft beer is something of an outcast in Dallas. The new instantaneous coolers and compact pre-coolers which can be set anywhere should go a long ways towards making Texans appreciate a good glass of beer, if some dealers will just do a little missionary work.

On the other hand, the sale of bottled beverage coolers, especially those of the rapid, low-temperature type, has been phenomenally successful in Dallas and other parts of Texas. All dealers handling them seemed to be enjoying a fine business on beverage coolers.

#### Colored Photography In Air-Rite's Sales Plan

Kelvinator commercial refrigeration dealer in Dallas is Air-Rite Corp. It's report was similar to that of other dealers; business had been slow, but a number of jobs were in sight which would probably be closed before the season ended.

Air-Rite Corp. is justly proud of the locker plant which it has installed at Carrolton, Tex., one of the very few in the Lone Star state, and one which is working out quite successfully. This locker plant has some unusual features of design which are described in a separate article.

The locker plant installation afforded a fine opportunity for Mr. Cheetwood, head of the Air-Rite Corp., to indulge in his favorite hobby of color photography, and if there is anything in the old Chinese proverb of a picture being worth 10,000 words, the dealership should sell some more locker plants.

For Mr. Cheetwood has obtained some of the finest color photographs you ever saw of the locker plant, the ones showing the rich, red color of the beef being particularly effective. With the assistance of the local Eastman Kodak store he has had the photographs mounted in tiny slides, and has a small projection machine which a salesman can very easily carry with him, also a small silver screen. What kind of a demonstration could be more interesting or effective?

#### Matthews' Modernizing Story Wins Jobs

Carrying the Vilter line of heavy refrigeration equipment and the (Concluded on Page 15, Column 1)





#### New Type Dehydrating Ovens, only \$61 and up!

With new, speedy, open coll heating elements you POSI-TIVELY get the fastest dehydrating results, with new low economy of operation.
 Steps up Service, too, by

Steps up Service, too, by cutting time.
A rugged, all purpose oven, immensely practical, for in addition to dehydrating, it can be used for baking finish on parts, or for baking varnishes—on motors—after reconditioning.

used for baking finish on parts, or for baking varnishes—on motors—after reconditioning.

Large refrigerator manufacturers recommend Despatch Ovens, definitely.

RIGHT NOW NEARLY 400 IN OPERATION.

• Made to meet your need, it is a truly outstanding oven, within reach of your pocketbook. You owe it to yourself to write for full particulars. It is the OVEN YOU HAVE LONG WANTED.



Many models available
Priced \$61.00 to \$402.00 according to size.
Gas or Electric. Automatic or manual control.

SOLD BY LEADING JOBBERS

DESPATCH OVEN CO., Minneapolis, Minn. Manufacturers of high production Dulux and synthetic enamel baking ovens, dryers, industrial furnaces

# Another Reason You'll Make More Money with the Complete CURTIS Line Long known as one of the most profitable lines in the industry, the addition of the Curtis Refrigerated Store and Office Cooler now makes it even more attractive to you. It opens up a great new market — makes possible more sales and profits. All classes of retail establishments—stores, offices, banks, etc., are demanding air con-

All classes of retail establishments—stores, offices, banks, etc., are demanding air conditioning now. You can fulfill this demand with Curtis' complete, factory designed, packaged air conditioning unit. It mechanically

cools, dehumidifies, circulates and filters the air—adaptable for heating—easily and quickly installed—3 and 5 ton sizes.

The Curtis line of condensing units includes sizes from 1/6 to 30 H.P., air and

The Curtis line of condensing units includes sizes from 1/6 to 30 H.P., air and water cooled. There's a Curtis model for every refrigeration and air conditioning requirement—also unit coolers, coils, evaporative condensers, etc., precision engineered to deliver economical, efficient, care-free performance.

If you're interested in profits, in increasing your sales, write to Curtis for complete information today.

Curtis Refrigerating Machine Company Division of Curtis Manufacturing Co. 1912 Kienlen Avenue, St. Louis, Mo.

"Builders of Condensing Units Since 1922"





45 Air Cooled Units-42 Water Cooled Units-1/6 to 30 H.P.



# Southwest Dealers Use 'Elastic' Prices **But Manufacturer Attacks Method**

(Concluded from Page 14, Column 5) Williams Ice-O-Matic line in the smaller equipment, Will Matthews finds a great deal of his work in modernizing old plants of all types.

warm

s ex-

pathy

most

refer

eems

legal

quip-

which

Which

and

kans,

inks

and

Was

style

cus-

g or

prob-

nents

ilt in

put

ctors

tcast

neous

olers

ld go

xans

er, if

little

cially

ature

cess-

them

Plan

gera

-Rite

had

iobs

bably

id of

alled

very

one

cess-

some

1 are

Mr

inese

nould

ained

aphs

. the

or of

ctive.

local

1 the

ides.

chine

asily

ilve

stra

g or

eavy

er

to

st

F.,

Such a definite story of operating economy and increased efficiency can be told with new equipment that there is very little if any problem in selling a modernization program if the user has any interest whatsoever, says Mr. Matthews.

Among Mr. Matthews' recent jobs is an interesting one in the form of a cooling station at a "pick-up" point for Grade A milk, where farmers must bring their milk by a certain time after milking. This has been described in detail elsewhere.

#### Conditioning Good For Carrier-Bock

Distributor for Carrier air-conditioning and commercial refrigeration equipment, this company has concentrated on air conditioning thus far, and apparently with considerable

According to I. I. Bock, head of the firm, the business done for 1939 through the middle of April had amounted to a dollar volume of \$100,000, and most of this business had been in rather small installations. Maybe it's true that air conditioning has been slow for the Southwest this year, but not for Mr.

#### Buzzards Row' Reports Slump In March

Known to all in the refrigeration trade in Dallas as "Buzzard's Row" (some call it "Vulture's Row") is the block on Commerce St. where stand almost side by side representatives of practically all of the major refrigerated display case firms. On the picturesquely named block are Armstrong Refrigerator Co. (C. V. Hill & Co. and Servel); the Hussmann Distributing Co. of Dallas; the Ed Friedrich Sales Corp. office; the McCray branch; the Super-Cold Southwest Co.; and the Weber Showcase & Fixture Co. distributor.

Most of the dealers were grousing about the March and April business, while admitting that the December, January, and February volume had been as good as it has ever been.

"Casey" Jones of Ed. Friedrich, for example, had sold 17 jobs in January, and February had been just about as good, but March, which should have been better, slumped off.

Mr. Jones has apparently something of a strangle hold on selling to the Italian markets in Dallas, of which there are quite a few. It seems that he went to some effort to sell his equipment to the head gazabo or main merchant in the district, and all the other merchants wouldn't think of buying anything else than that of the type owned by the chief operator. Which trick might work

According to Paul Armstrong of Armstrong Refrigerator Co., the commercial business is about 75% replacement now in Dallas, which is bringing out a trade-in problem. Dealers won't say so, but this problem is being met by an "elastic" price schedule, something of the type used in the automobile business.

#### San Antonio

Believe it or not, you frost-bitten residents of Boston, Buffalo, Chicago, Detroit, Minneapolis, and other points north, but the chief complaint in San Antonio is that the weather has been "too damn nice."

Not that San Antonio would welcome snow, but the merchants wake up every morning hopeful that it is pouring rain—and every morning for nearly a year they have had nothing but bright sunshine.

Consequently the surrounding country, which is predominantly a stockgrowing country, has dried up, and all business is suffering as the rancher is suffering. It has come to the point where the rancher must buy feed for his stock, and rather than that many of them are selling their stock too early, and taking

considerable losses on their prices. A bad market for the grapefruit crop in the lush Rio Grande valley has been another disturbing factor recently. Price offered for grapefruit has been \$4 a ton, and rather than accept such prices the growers are burying the fruit. Distribution and storage is the problem on these Valley crops, a problem which it seems refrigeration and refrigeration alone can help to solve.

In spite of these factors, San Antonio commercial dealers aren't too downcast. At the Westbrook Carburetor Co., parts and supply jobber, it was said that business was holding up well, from indications that were obtainable. And the beverage business here as elsewhere in Texas is still going pretty good guns.

#### 'Controlled' Distribution Used By Friedrich

Longtime manufacturer of commercial refrigeration, the Ed. Friedrich Co. has a more or less "controlled" method of distribution. In this "controlled" setup, sales agents are employed to sell the Friedrich equipment which is stocked and displayed for them in stores which the Friedrich Co. owns.

With such a setup, Friedrich has an opportunity to exercise a pretty fair amount of control over sales practices, and that's what they intend to do this year. According to George Friedrich, vice president, the company is going out after the "elastic" or "expanded" price situation that exists in the business.

This "elastic" price has been used as a trading means in the commercial refrigerator field, chiefly as a means of making a prospect think he is getting something on his old equipment. For example, when a salesman foresees that there is going to be a trade, he will jump the opening price of an \$800 list piece of equipment to \$1,000 or more, thus giving himself plenty of margin on which to meet the prospect's bargaining.

Friedrich's vice president says that their organization is being commanded to quote list prices this year and to get list prices.

Furthermore, the sales agents are being instructed to adhere to the schedule of trade-in allowances set up and published by the Commercial Refrigerator Manufacturers Association. In cases where there is any doubt as to the age of the case (on which trade-ins are based) the buyer must be asked to produce a bill of sale or sign an affidavit as to its age.

#### Straus-Frank Dealers Rush 'Package' Lines

Serving a wide area and many dealers, the Straus-Frank Co., Frigidaire distributorship, has turned some of its attention towards moving "packaged" commercial refrigeration equipment through its household

To this end, a special catalog in packaged units has been prepared under the direction of T. W. Thiele, general sales manager. This catalog gives the following information:

(1) The general classification of equipment.

(2) The market (ice cream cabinets for sportsmen to hold their game in, etc).

(3) Prices

(4) Category of the various models.

The same is done for the Koch line of equipment which can be sold as plug-in equipment.

Armed with this catalog any household dealer can sell the equipment listed with no difficulty, and it can be installed without much fuss.

#### Good Salesmen Scarce, Crawford Complains

"What the commercial refrigeration business needs today is good salesmen, but how are you going to find them," exploded P. K. Crawford, head of the Alamo Refrigeration Co., Frigidaire retail commercial dealer in San Antonio.

(Apparently Mr. Crawford, although an ardent reader of the NEWS, hadn't seen the April 19 issue, which has enough stuff to train any sales-

"Service men get scared when they have to talk of any deal over \$100, and salesmen grow lazy on the job in

a month," he continued. "I've had some luck in having service men bird dog for me, but that's about all," he asserts.

Mr. Crawford, who has installed about any kind of a refrigeration system you can name, finds things not too bad this year. Especially in the smaller towns near San Antonio which he works.

Beverage cooling has been a good item for Mr. Crawford; he helped to design and pioneer a forced-flow water bath cooler sold in Texas.

On draft beer cooling, Mr. Crawford has solved the problem of the lack of basements with the Worthington Pump Co.'s "Bru-box" direct draw cooler, in which water sprayed over the keg keeps the beer cool.

#### Dealers Unprotected, Potthast Believes

In the refrigeration business more years than he likes to remember, Mr. Potthast is now handling the Copeland line of commercial refrigeration machines and is doing a pretty sizeable service business.

As an old-timer, Mr. Potthast has some ideas about what is wrong with the business and it all narrows down to the fact that the manufacturer failed to protect his good dealers.

That is the reason, he says, why a number of the major lines are not represented in commercial refrigeration in San Antonio. They gummed up the works so bad that established dealers won't take up a franchise, no matter how attractive the offer.

What have the manufacturers done

that Mr. Potthast and the other dealers don't like? Just that they haven't played ball with even the good dealers, working to set up a new dealer in the territory, or selling direct to some of the accounts that the dealer might well sell to.

Mr. Potthast says "yes, the beverage cooling business is good, but watch out for it. Too often the operator tries to get away with too small a box."

Size of the cooler should be decided by the peak load that the user is going to have during a particular period of operation—usually Saturday. Good idea, advises Mr. Potthast, is to make a personal check on the number of cases consumed in that time, and not rely on the prospect's word for it.

#### **New Plant Occupied** By Penn Brass

ERIE, Pa.—The Penn Brass & Copper Co. recently moved into its new plant at 20th and Powell Ave. A feature of the formal opening was the reception and inspection trip held for members of the Society of Mechanical Engineers, the Superintendents' Association, the Erie Purchasing Agents Association, and their friends.

Although equipment and machinery were first moved to the new plant during September, 1938, K. W. Wilks, official in charge of the opening, said that the plant will not be completely occupied until October.

The company, which manufactures seamless brass, copper, and aluminum tubing, was incorporated as the present organization in August, 1920.

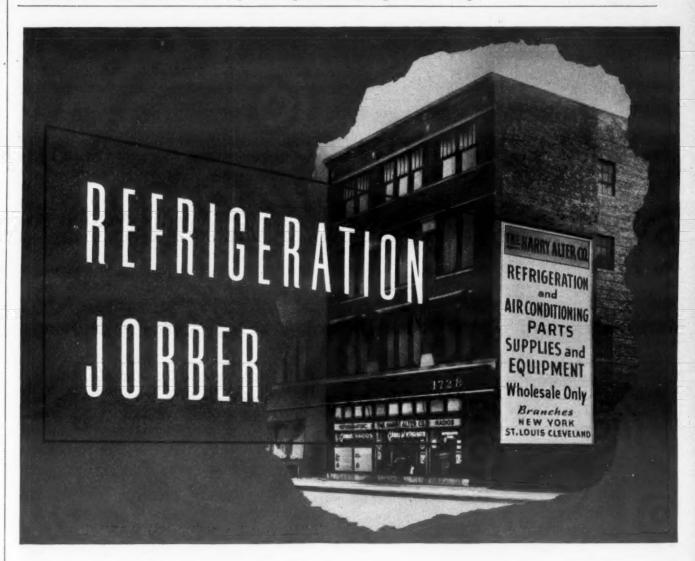
#### **Westinghouse Promotes** Marvin Smith

EAST PITTSBURGH, Pa.-Marvin W. Smith, manager of engineering of Westinghouse Electric & Mfg. Co., last week was elected a vice president of the company. Mr. Smith, who will direct all the company's engi-neering activities, has been associated with Westinghouse since the day he left college in 1915.

He has been manager of engineering since May 7, 1936, during which time the company has produced several major new developments in engineering, including the Precipitron, new electric air-cleaner; new lines of improved switchgear for the safe, rapid, and economical handling of high-voltage electricity; and has launched into new areas of fundamental scientific and engineering research, including studies of the nature of matter, and experiments in "smashing the atom."

At completion of his student course at Westinghouse, he was selected by the late B. G. Lamme, then chief engineer, to work for six months in his office, studying special design problems.

In 1917, Mr. Smith was assigned to the power engineering department where the large rotating electrical machinery supplied by the company was designed and manufactured. He began as a design engineer and rose steadily through the department, becoming section engineer in 1927, and division engineer in 1930, which position he held until 1936, when he was appointed manager of engineer-



#### REPORTS SALES INCREASE OF AN INCREASE of almost 50% in sales over the previous year is something to get excited about. It happened

to The Harry Alter Company, important Chicago refrigeration supply house.

This increase refers to their sales of TEXACO CAPELLA OILS in 1938.

With branches in several cities, this fast-growing organization has registered amazing sales increases of Texaco Capella before. In 1937, it doubled the sales volume of Capella Oils that had been so optimistically set. Through Texaco Capella Oils, The Harry Alter Co. has experienced increases in sales volume year after year, with no customer complaints. What jobber can ask for more than this?

Texaco Capella Oils can be ordered from 2229 Texaco warehouses. Phone the nearest to you, or write direct to: The Texas Company, 135 East 42nd Street, N. Y. C.

Texaco Dealers invite you to tune in The Texaco Star Theatre-a full hour of all-star entertainment-Every Wednesday Night-Columbia Network-9:00 E.D.T., 8:00 E.S.T., 8:00 C.D.T., 7:00 C.S.T., 6:00 M.S.T., 5:00 P.S.T.



PERFECTED LUBRICATION FOR REFRIGERATION COMPRESSORS

# New Products

#### Seeger Cases Employ New **Cooling Principles**

ST. PAUL-A new series of display cases employing forced air circulation and a new line of stainless steel commercial refrigerator cabinets, some of which are also equipped with this device, have been introduced by Seeger Refrigerating

The display cases, said to embody a new principle of display cooling, are factory equipped with blower-coil units specially designed in Seeger's engineering laboratories. These units, it is claimed, circulate, wash, humidify, and refrigerate the air in every corner of the cases, thus materially cutting discoloration and shrinkage losses and keeping perishable foods fresh for longer periods of time.

Available in 6, 8, 10, or 12-foot lengths, these cases are 50 inches high and 34 inches deep. New extended surface coils are installed in lower unit at end of case; a motordriven fan forces air over coils. Cases are insulated by 3 inches of cork board wrapped in waterproof paper and sealed to the case frame. Sliding doors of exclusive Seeger pattern provide access. All cases have all-porcelain finish, even in storage compartment. Prices range from \$600 to \$1,150.

The stainless steel cases also are available in four models, three of which are air conditioned. Model S-220 is the self-contained standard type with ice maker coils. Model ACS-320, first of the units, is also self-contained, unlike the two larger models. These two cabinets are shipped set up, but can be taken apart if necessary.

#### Complete Catalog Issued On Friez Controls

BALTIMORE - Featuring new deluxe humidistats and thermostats. "hydraulic action" controls, snap and slow-acting gas valves, and stoker control sets, the 1939 catalog of Julien P. Friez & Sons division of Bendix Aviation Corp. has recently been announced.

#### Minneapolis Introduces Differential Controls

MINNEAPOLIS-Two new differential controllers designed with two bellows assemblies that oppose each other and react to variations in the difference in pressure or temperature between the high and low pressure or temperature elements have been introduced by Minneapolis-Honeywell Regulator Co. here.

Differential "Pressuretrol" can be installed with an orifice to control the flow of steam or liquids, or it may be used as an alarm device on cooling water systems and on large refrigeration condensers.

Differential thermostats are similar to the Pressuretrols except that they are made up with temperature elements instead of pressure bellows assemblies. They can be used for water conservation on air-conditioning jobs using well water; on attic fans where one element is placed in the outside air and one inside to turn on the fan whenever the differential between the two temperatures reaches a predetermined point; and to prevent condensation in underground wiring tunnels where it is necessary to maintain the temperature above that of the outside air.

Both the Pressuretrols and the thermostats are available in modulating as well as "make and break" mercury switch models.

#### Gates Catalog Lists Belts For Obsolete Makes

DENVER-Gates Rubber Co. has issued its 1939 edition of the Gates Belt Guide for refrigerators, washing machines, stokers, oil burners, water pumps, wood-working, and other

Said to be one of the most complete belt guides ever published, the book lists even those makes and models that are no longer manufactured and for which it is difficult to obtain satisfactory belt fits.

This booklet may be obtained through jobbers or by directly to the Gates factory.

#### Curtis Designs Packaged Store Conditioner



Semi-portable, this store and office cooler is available in 3 and 5-ton capacities.

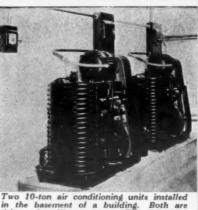
ST. LOUIS-A new "packaged" air-conditioning unit, the "Curtis store and office cooler," has been introduced by Curtis Refrigerating Machine Co. here. Available in 3 and 5-ton capacities, the new unit is semi-portable, requiring only water and electrical connections for instal-

The unit cools, dehumidifies, circulates, and filters air, and is adaptable for heating as well. Only 51/2 feet square, it occupies a minimum of floor space, it is claimed.

Cabinet is of heavy gauge automobile steel, with a silver Hammerloid finish or flat prime coat to take any matching color. It is lined with insulating and sound absorbing material, and is equipped with two small dials on the front for complete control of the system.

#### Metal Case Introduced For Recorders

CHICAGO-A metal carrying case for better protection of its portable recording thermometer has been introduced by Practical Instrument Co. Adaptable to innumerable applications, the thermometer is simply constructed and simple to use, its manufacturer claims.



Two 10-ton air conditioning units installed in the basement of a building. Both are driven by Wagner type RP polyphase



er type RP polyphase motor drive this air conditioner in large department store.



er type RP RP polyphase motors in a large auditorium air ditioning system.

#### **80 Models Described** In Brunner Catalog

UTICA, N. Y .- More than eighty models of condensing units, ranging from 150 lbs. to 15 tons of refrigeration and from ¼ hp. to 15 hp., are described in the new catalog just issued by Brunner Mfg. Co.

All types of units are illustrated, and complete specifications are presented, as well as capacities with methyl chloride and "Freon-12" refrigerants.

Most suitable use for each model is recommended, with advice as to limitations, kind of refrigerant, and air conditioning adaptability.

Typical cross section of a twocylinder Brunner compressor is illustrated in a full-page cutaway drawing, with all parts labeled.

A similar illustration of a fourcylinder unit also is contained in the catalog.

General engineering data and information are presented in a section in the back of the catalog. The term "service factor" is explained, there is a table showing B.t.u.-per-hour heat leakage per degree temperature difference, and there is a chart of suggested temperatures to operate coolers and refrigerators with different kinds of foods, liquids, and other products being stored.

Methods of figuring refrigeration loads for commercial applications are given for walk-in coolers, grocery, restaurant, and hotel refrigerators, display cases, and double duty or freezer cases.

Other data includes information on concrete milk coolers, dairy bottles milk cooling, suggested condensing unit capacity for ice cream counter freezers and hardening cabinets, and charts for pressure temperatures, head pressures of air-cooled condensing units, and head pressures of water-cooled condensing units.

#### 6 Washers, Ironer Added To Crosley Line

CINCINNATI-Four new electric washer models, two washers powered by gas engines, and a new electric ironer have been added to the line of home laundry equipment manufactured by Crosley Corp.

Chief feature of the washers is an invertible agitator which can be used in two positions, thus providing, it is said, all the advantages of both top and bottom washing methods. This agitator is made of aluminum, has three high wings, and is removable.

Mechanism of the new washer unit is said to have a simplified drive and a pivot ball bearing on every moving shaft. The few moving parts are provided with lifetime lubrication, eliminating the necessity of oiling.

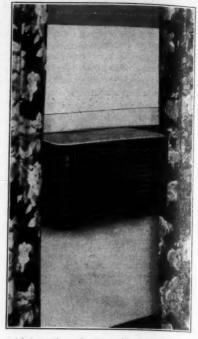
Control lever is of the automobile type. A convenient electric emptying pump is available at slight extra cost. Model L712 is equipped with a time switch which automatically stops the motor at the time set. Dial of this switch indicates the proper washing time for various materials.

Prices of these new washers range from \$44.95 to \$79.95 f.o.b. factory.

The two gasoline-powered models. built especially for use on farms or other places where electricity is not available, are identical with the two lowest priced electric models except that they are powered with the latest type Briggs & Stratton 1/4-hp., 4cycle, air-cooled engine. They list at \$79.95 and \$89.95 f.o.b. factory.

The new Crosley ironer has a selfaligning chromium ironing shoe, fully automatic fingertip and knee control, and a 6 x 26-inch rust-proof steel roll which provides 145 sq. in of ironing surface. There are only six major moving parts in the drive mechanism. The unit lists at \$59.95 f.o.b. factory.

#### Airtemp Window Cooler Now In Production



Airtemp's window-sill conditioner, shown above, is powered by a 1/3-hp. radial compressor.

ture

oper

for

used

city.

west

Okla

T

head

Dug

made

Este

ing

7 fee

F. th

room

from

Th

the i

most

each

Th

(see

solen

Of

room

thern

entia

stat

Thus

ential

under

contr

tures

could

Wh

closes

throw

speed

is use

LIN

Th

Tv

DAYTON, Ohio-Volume production has begun on Airtemp's latest bid for low-cost room cooling business-the "Cool Breeze" window-sill conditioner made possible by recent development of a new small-sized 1/3-hp. radial compressor—according to an announcement by A. C. Downey, president of Airtemp division, Chrysler Corp.

The new unit, intended for either office or home use, is only 12 inches high and 24 inches long. It is said to be extremely simple (both mechanically and from a standpoint of operation) and to require no connections except an ordinary electric cord and plug.

A new Chrysler process (known as Superfinish) for finishing hardworking parts is said to reduce friction in the compressor and thus to assure longer life and more quiet operation. The company claims that there will be no field service required on any mechanical equipment within the cabinet after the units have been placed in operation.

#### Sherer-Gillet Restyles '500' Line of Cases

MARSHALL, Mich. - Completely restyled and equipped with many refinements in the way of working convenience and accessory units, Sherer-Gillett Co.'s revamped "500" line of three-platter display cases has been introduced at a lowered price to the company's distributing organiza-

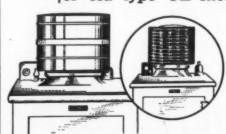
Advantage of a case providing display three platters deep, company officials pointed out, is that greater display area is made available without the use of increased floor space, and that the greater capacity created makes possible more varied display and less frequent loading.

#### Chicago Eye Shield Catalog **Contains Safety Hints**

CHICAGO-General safety information as well as product listings are included in the 48-page catalog recently issued by Chicago Eye Shield Co., manufacturer of goggles, respirators, spectacles, masks, welding helmets, and other safety devices.

Besides regular product listings, one page of the catalog gives general information on how non-shatterable lenses are made.

#### JOBBERS wanted for MONITOR MODERNIZER for old type GE monitor refrigerators



The Monitor Modernizer serves two important purposes. It eliminates the complaint of dirt catcher and converts the top into a handsome object that is always clean. Secondly, it improves the efficiency of the GE refrigerator as the Monitor Modernizer acts in a chimney-like fashion and creates an up-draft, dissipating the heat units that ordinarily linger around the colls; easy to dean, prevents accumulation of dust.

refrigerator modernized appearance by covering the Monitor Top with the small plates over top coil. Write us today.

MONITOR MODERNY.

MONITOR MODERNIZER CO., 220 W. Huron St., CHICAGO

### WAGNER MOTORS

Assure Long Life and Satisfactory Service on Air Conditioning and Refrigeration Equipment

Dependable, economical and efficient operation of air conditioning and refrigerating installations depends largely upon the reliability and performance of the motor which drives them. That's why manufacturers and contractors who recognize the value of dependable and sturdy motors use Wagner motors. In addition they know that Wagner motors are available in numerous types and sizes with

proper mechanical and electrical characteristics to fit every requirement, and that they receive prompt service through Wagner's 25 factory service branches located throughout the United States and Canada.

#### Send for These Valuable Bulletins

Wagner Bulletins No. 177, 179 and 182 illustrate the complete line of Wagner motors. These bulletins are valuable to all users of motors and will be sent FREE upon

Wagner Electric Corporation

6400 Plymouth Avenue, Saint Louis, Mo., U.S.A.

# Commercial Refrigeration

# Narrow Temperature & Humidity Limits Maintained To Aid Storage of Bulbs

MUSKOGEE, Okla.—A rare application of refrigeration equipment is that in which the condition produced by nature which we know as a "frost" is reproduced artifically in a floral plant bulb storage room.

Some bulbs need to be held at temperatures which halt their growth, others must be chilled before being planted.

Such an installation is also difficult to engineer, because of the necessity of holding closely controlled temperatures and humidities, and because any deviation from the specified conditions will be likely to result in the loss of all the bulbs being stored.

#### WORKING SATISFACTORILY

An installation which is working to the complete satisfaction of the operator of the plant bulb grower for whom it was made is that being used by Bebb's Floral Co. of this city. Famed throughout the southwest as a plant bulb grower, Bebb's has found the installation made by the Oklahoma Refrigerating Co. of Oklahoma City completely satisfactory.

The job was sold by H. A. Dugger, head of the Oklahoma Refrigerating Co.; engineered by his son, Earl R. Dugger, and the installation was made under the direction of George

Two rooms are cooled, one measuring 21 x 21 feet, and the other 21 x 8½ feet. Shelves are spaced

es id

7 feet apart in the 7-foot-high room. The smaller room is kept at 33° F. the year around, while the larger room is kept at temperatures ranging from 33 to 55° F., with rather high relative humidities.

#### DUAL CONTROL SYSTEM

The dual control system used in the installation consists of two thermostats and two solenoid valves in each room, with synchro-fan control for the forced-draft cooling units.

The control system is so wired (see wiring diagram) that if one of the solenoids should stick the other solenoid goes into action immediately.

Of the two thermostats in the room, one is a Minneapolis-Honeywell thermostat with a variable differential, the other is a Mercoid thermostat with a "stop" setting only. Thus if something should happen to the control with the variable differential, by which the system operates under normal conditions, the Mercoid control will function before temperatures dangerous to plant bulb life could be reached.

#### PARALLEL HOOKUP

When the controlling thermostat closes, it breaks a relay device and throws the two-speed fan onto slow speed.

A back-pressure regulating valve is used on the suction line from the larger room to maintain the high

LINE

humidity condition desired. Alco thermal valves, Detroit Lubricator Co. solenoids, and Peerless two-speed synchro-fan controllers are used.

Another quite unusual feature of this installation is that the two 1½-hp. York condensing units which furnish refrigeration for the two rooms are connected in parallel. This is accomplished by connecting the liquid line and condensers of the two machines, and by providing a double connection between the crank-cases.

One of these crankcase connections is above the oil level, the other is below the oil level. Purpose of this is to maintain a constant oil level, and to eliminate the chance of the lubricating oil from draining out of one compressor into the other. The oil drain valve in the compressor body was used to make the lower connection, while a hole was drilled into the top side of the compressor to make the other connection.

#### REGULATING OPERATION

Operation of the machines is started and stopped by means of pressure controls, one machine cutting in and operating until the load calls for the operation of the other compressor, when it will cut in.

Piping connections also have been made so as to permit the operation of one machine on each room, or both machines on both rooms (the latter under the parallel arrangement of the compressors as described above). It is sometimes necessary, it is explained, to have the machines operating separately on the two rooms when one of the rooms is being loaded, as the big load occasioned by dumping in so much material from the outside at one time is likely to overload the system and bring a temperature rise in the other room, where constant temperatures, once started, must be held.

#### ROOM SHUT-OFF PROVIDED

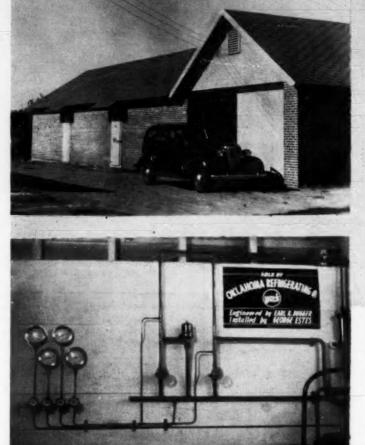
Manually operated shut-off valves on the suction lines from each room permit either of the rooms to be shut down at any time for any reason, and the system will then operate on the one room only.

The four Jas. P. Marsh Co. gauges used on this job (shown in the photograph on this page) are for the following purposes: two gauges which show the suction pressure on each machine, one gauge which shows the suction pressure on the room side of the back pressure valve, one gauge showing the head pressure on both machines.

Each condensing unit is equipped with a liquid line dryer, and has a Peerless heat exchanger.

In the machinery rooms the condensing units are installed up against louvers, built in especially to supply outside air for condensing purposes.

#### An Unusual Application Gets an Unusual Installation





Above, left: Exterior view of the bulb storage rooms of Bebb Floral Co., Muskogee, Okla. Lower left: Two of the gauges shown in this picture show suction pressure on each machine, one shows suction pressure on the room side of the back pressure valve, and one the head pressure on both units. Above: Interior of one of the rooms, showing forced-draft cooling unit and dual thermostats.



IN Steeplechasing
OR REFRIGERATION

# THE FINAL TEST OF MERIT IS Performance

Write for Convenient New Wall Stock List



● Ten years ago the Rotary Shaft Seal was a "dark horse" to the refrigeration field. Today this compressor shaft seal is an odds-on favorite everywhere. The reasons for its sweeping popularity can be briefly told: it positively stops shaft leaks, is low in cost and easy to install, lasts longer, and ends service "call backs." These are established facts, proved by ten years' performance under every imaginable field condition.

• Prove for yourself the greater efficiency and economy of these replacement units. Make a few test installations and check cost, ease and speed of installation, quiet operation, length of life and freedom from re-servicing with results obtained from seals you have been using. You'll be money ahead, and your customers will thank you, if you do.

You now have the advantages of improved models and lower prices

ROTARY SEAL COMPANY 803 West Madison Street · Chicago, Illinois

Continental European Office: Waldorpstraat 52, Den Haag, Netherlands Canadian Office: 382 Victoria Avenue, Westmount, Montreal

**ROTARY SHAFT SEAL** 

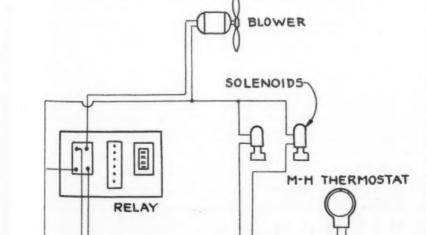


Diagram For Dual Control

Wiring diagram for the dual control system used in the bulb storage rooms of Bebb Floral Co.

MERCOID THERMOSTAT

# Jobber activities

# Jobber Designs Special Charging Board That Is Efficient & Simple To Operate

DENVER - Simple enough for a layman to operate, and made so as to waste only a minimum amount of gas, a specially built charging board designed and constructed by D. B. Curran of Curran Refrigeration Service here is in use by Refrigeration Parts & Supply Co., local jobber, for refilling refrigerant cylinders brought in by service men customers.

The two upper gauges register pressure of gases on the board. The lower gauge shows pressure on the drums to be charged.

Arbitrarily numbering the valves from one to eight, beginning on the left and then following on down, across, and up to the right (excluding the two valves in the center), charging procedure is as follows:

If a drum is to be charged with SO<sub>2</sub> (sulphur dioxide), it is attached by means of the charging line on the right. The valve on the drum is opened, as is also valve No. 5 and the upper of the two center valves. This is to purge the drum to the roof.

Then the upper center valve is closed, the lower center valve opened, and the compressor started to pull a vacuum on the drum. If there is any oil or sludge in the drum, the drum is

inverted so as to empty these impurities into the glass jar. Any oil remaining in the drum is trapped in the glass jar. Excess moisture is removed in the dehydrator.

When the lower gauge shows 22 inches of vacuum, which is sufficient at Denver's altitude, the service drum is placed on a platform scale and weighed. The No. 5 valve is closed and the No. 6 valve is opened, and then the vacuum pump or compressor is switched off. The supply drum is generally heated with an acetylene torch to hasten the flow of liquid. When the scales show that the service drum contains the desired amount of refrigerant, the No. 6 valve and the drum valve are closed.

With the lower center valve closed and the upper center valve open, No. 5 valve is opened and the flexible line is discharged to the roof. To prevent any escape of SO2 to the room, the upper center valve may be closed, lower center valve opened, and by starting the pump a vacuum may be drawn on the flexible charging line before disconnecting the line.

To charge drums with CH3CL (methyl chloride), the service drum is attached to the line on the left and the same procedure is followed.

Valves No. 1 and No. 8 are emergency discharge valves, discharging the board directly to the roof. Valves No. 2 and 7 are auxiliary charging valves for use in the event that valves No. 3 and 6 should become inoperative.

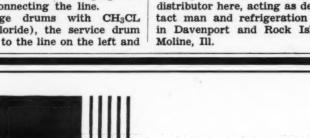
Once the supply drum valves and auxiliary supply valves located below the supply drums on the right are opened, valves No. 3 and No. 4 or valves No. 5 and No. 6 and center valves on the charging board are used during discharging, evacuating, and charging operations.

The glass sump or jar prevents any foreign matter from entering the crankcase of the pump and also shows the service man the equivalent of an X-ray view of his drum. The sump can be emptied easily with the valve in the bottom.

Regarding the value of this charging board, Harold R. McCombs, president of Refrigeration Parts & Supply Co., declares: "We have found, upon close check of our gas purchases and sales, that our loss is not exceeding 2%, or 3 lbs. per 150-lb. cylinder. With our transfer loss this low, we believe we have turned what is usually termed a profitless nuisance into a paying accommoda-

#### Leo White To Represent Republic Electric

DAVENPORT, Iowa-Leo P. White has been appointed a representative of Republic Electric Co., wholesale distributor here, acting as dealer contact man and refrigeration engineer in Davenport and Rock Island and





"Since our advent into the refrigeration industry, we have had a full schedule in Air Conditioning & Refrigeration News. That we consider your publication an important medium in our advertising program is evidenced by the fact that we have increased the size of our advertisements practically every year. We feel that the assistance of your publication has been extremely helpful to BRUNNER in attaining its high position in the industry."

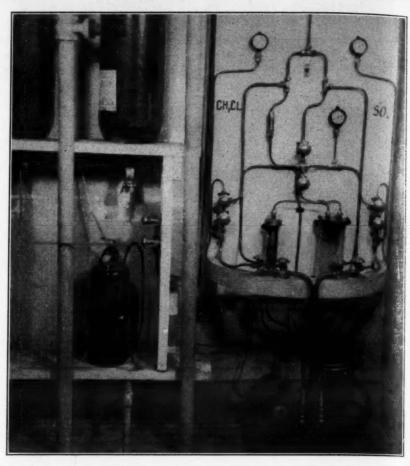
- - B. J. Scholl, Sales Mgr., Brunner Mfg. Co.

Advertising creates intangible values. It's frequently subject to controversy. Some folks believe in advertising, some don't.

But there is no escape from the fact that in a great many cases manufacturers who today occupy high positions in the industry have from their very beginnings consistently used advertising in the NEWS in developing profitable markets.

Air Conditioning & Refrigeration News "The Newspaper of the Industry"

#### Special Charging Board Cuts Losses



Eight Los Angeles Servicemen Match Their Skill In Contest Sponsored By West Coast Jobber





Spectators had fun, but there were plenty of serious moments for both contestants and judges in the refrigeration tube bending contest sponsored by Pacific Metals, Ltd., parts jobber, in connection with the April meeting of the Los Angeles Refrigeration Service Engineers' Society.

Six of the eight entrants are hard at work in the picture above, with the second-prize winner, Paul Kiefer of O'Keefe & Merritt Co., second in the row nearest the camera, and J. R. Payne, first-prize winner from Refrigeration Service, Inc., at the head of the second row. Mr. Payne won a Toastmaster "hostess set." Mr. Kiefer an electric drill, and W. L.

Flewelling, third-prize Prestolite torch outfit.

Mr. Payne's total time was 23 minutes, and Mr. Kiefer was last to finish. Screw drivers were given to contestants as consolation awards.

Judges are shown pondering the entries in the lower picture. Around the table from the left, they are: Bill Nadeau, W. W. Allison, Bill Wallace, and Jimmy Rogers. Backrow spectators include Dexter Folsom of Frank Gillette Co.; Bill Irving of Refrigeration Supplies Distributor; Gordon Brock of Pacific Metals, Ltd.; and J. W. McClure. (Pictures by L. P. Roth of Refrigeration Service, Inc.)

#### GOLDBERG HERMAN



MANUFACTURER'S AGENT ANSUL CHEMICAL CO. RANCO, INC. CHICAGO SEAL CO. MCINTIRE CONNECTOR CO. STANDARD REFRIGERATION CO.

20 N. WACKER DRIVE - CHICAGO

adver with

engin memb "knoc meets detail Taylo the F Mr. to re group

year,

forme

DE is the world, most i tioning Acce not pr on the a wat develop by the

the in

air dis "Dur

grille c probler used in break 1 Mr.

Surge **Filtrine** 

# air Conditioning

# Philadelphians Seek Standard Practices, Better Selling; Group's Growth Cited

PHILADELPHIA-"Who is going to cast the first stone?" was the question asked of air-conditioning distributors when they first gathered to discuss the organization that has since become the Air Conditioning Division of the Electrical League of Philadelphia.

While members of the industry had participated in promotional and advertising campaigns conducted by the Philadelphia Electric Co., it was not until the group became allied with the Electrical League that the association took any definite form.

M. S. (Sid) LeBair, York branch manager and chairman of the group, states that the association was formed to discuss mutual problems confronted by men engaged in the air-conditioning business. Interest has centered on obtaining standard engineering practice among the members and the elimination of "knocking" tactics formerly employed in selling.

The Philadelphia Association now meets once each month; organization details are handled by Sheridan Taylor, who is a salaried employe of the Philadelphia Electrical Associa-

ill

Mr. LeBair reports that in addition to regular business meetings the group has two "social" meetings each year, a cocktail party in the winter and a golf tournament in the summer. Progress of the association is indicated by the fact that in 1937 60 men turned out for the golf match and in 1938 130 reported.

In addition to the air-conditioning association, certain firms in the trade belong to the Air Conditioning, Heating & Plumbing Employers Association and others to the Heating, Piping, and Air Conditioning Association.

Membership in the Philadelphia air-conditioning association includes: Fred Wilson and Robert Miller, Wilson Air Conditioning Co.; Charles Phelps and James Pierce, Pierce-Phelps, Inc.; George Tuckerman and James Anderson, Anderson-York Co.; William Heggie and Henry Mc-Cullough, S. S. Fretz Co.; J. E. Rowland and Joseph Call, Elliott-Lewis Co.; Herman W. Goldner, Jr. and Jim Byrne, Herman W. Goldner Co.; John Connelly and Mr. Minkler, John A. Connelly Co.; Mr. Gregory, Raymond-Rosen Co.; Edward Dafter and Lloyd Church, Carrier Corp.; M. S. LeBair and Alfred Christensen, York Ice Machinery Corp.

The Philadelphia association recently recommended the appointment of chairman M. S. LeBair to the temporary National Council of the National Air Conditioning associa-

# Distributor & Factory Men Confer



P. J. Zilles, air-conditioning service department of Westinghouse, W. W. Taylor, chief engineer, and W. P. Oster, general manager, Equitable Equipment Co. of New Orleans, confer with Walter Goodwin, Westinghouse applications engineer, and G. E. Badger, Westinghouse district supervisor, about the new 15-ton self-contained Westinghouse unit.

#### New Orleans Firm Makes First Installation of Westinghouse 15-Ton 'Package' Conditioner

NEW ORLEANS-First installation in this country of the new Westinghouse 15-ton self-contained central station air-conditioning system was made in the Central Finance Co. offices by the Equitable Equipment Co., distributor.

W. P. Oster, manager of the firm's air-conditioning department, reports that the unit was delivered to the job as a single "package," and quickly installed in a small unused space behind a file room.

The unit was connected to the office by means of a duct system; heating is provided by a duct-type gas-fired heater located in the plenum of the system.

Because of the fact that the weather is warm in New Orleans during the early months of the year, the equipment has been in service a great deal of the time since January. Another recent installation made

by the Equitable Equipment Co. is a 71/2-ton Westinghouse system in the offices of the Union Savings & Loan Association. Here a Johns-Manville perforated ceiling was installed for purposes of air distribution, and Mr. Oster states that no drafts have been encountered in the operation of the system.

Other recent air-conditioning installations made by the company include a 100-ton system in the Paramount theater at Greenville, Miss.; a 60-ton system for the Capitol theater at Monroe, La.; a 21/2-ton system for the A. K. Newlin residence, Lake Charles, La.; and a self-contained conditioner for the E. R. Kaufman office, New Orleans.

The company also handles large commercial refrigeration equipment, and has installed several fur storage jobs in New Orleans. Fur storage systems are operated in connection

with the banks in New Orleans, and, because of climatic conditions (the city is sub-tropical and 20 feet below sea level), fur storage is a thriving business.

A recent installation in the third floor fur vault of the American Bank & Trust Co. provides for holding furs at 36° F., with arrangement for an occasional reduction to 18° F., for the purpose of "shocking" the larvae.

This system also provides drinking water for the building, the former CO2 system having been removed at the time the fur storage system was installed.

During the alteration, 60 tons of air-conditioning equipment were added to the building, using refrigeration capacity from a Carrier compressor already in use.

Mr. Oster is assisted in his sales work for the Equitable Equipment Co. by A. W. Harrison, and L. K. Levy calls on architects, engineers, and dealers. Present expansion plans of the company call for the appointment of a number of associate engineering contractors in the New Orleans trading area.

The company has a full staff of air-conditioning and refrigeration engineers. W. W. Taylor acts as chief engineer, and is assisted by Frank Riess, J. S. Moynan, Warren Moses, T. E. Alexander, and A. C. Schmitt.

R. S. Wogan heads the installation and service department of the com-



# PRODUCT (Packing) PROTECTION? Then send TODAY for

• Protect the eye-appeal of your products with KIMPAK\* Crepe Wadding. Guard against jolts in transit that can cause scratching and marring of fine metal and enamel surfaces-or chipping and breaking of more fragile items. Then your merchandise will reach dealers in first-class condition - ready for immediate display on the sales floor. That means quicker turnover for your dealers and increased profits for

Are you interested in

KIMPAK is as easy to use as a piece of string - will increase shipping room efficiency. There's a convenient size and form to

solve most packing problems. It is free of dirt or grit and other scratchy foreign substances. Find out for yourself how KIMPAK can solve your packing problems. Send coupon today for your FREE copy of the new portfolio with complete descriptions and samples. Address nearest sales

#### INVESTIGATE KIMSUL

Thermal Insulation for full (cabinet or filler strip treatment "K"-factor .27 B. t. u., flexible, low density, moisture and fungus resistant, low cost Samples and data on request.



Siag. U. S. Pat. Off. & Foreign Countries

PREE! 1939 Portfolio of Kimpak Kimberly-Clark Corp., Neenab, Wis.
Please send us the 1939 PORTFOLIO
OF KIMPAK. AC 5-10 Company ..... Attention of .....

Our product is .....

KIMBERLY-CLARK CORPORATION, Neenah, Wisconsin

Sales Offices: 8 S. Michigan Ave., Chicago—510 W. 6th St., Los Angeles—122 E. 42nd St., New York City

### Bald Heads' Sensitivity Makes Air Diffusion Important Problem, Kurth Tells Detroiters

DETROIT—Because "a bald head is the most sensitive thing in the world," air diffusion is one of the most important problems in air conditioning, declared F. J. Kurth of Anemostat Corp. of America, speaking before a group of nearly 100 men here recently.

According to Mr. Kurth, if air is not properly mixed it comes down on the heads of room occupants "like a waterfall." For this reason, he said, 15 years were spent in the development of a suitable air outlet.

Asserting that the "customer judges the air-conditioning system by the results," Mr. Kurth stressed the importance of having draftless air distribution.

"During the past five years many grille companies have devoted a great deal of time and thought to this problem, and many types of outlets used in air conditioning today are a great improvement over former methods," he said.

The initial theory behind the Anemostat, Mr. Kurth said, was to break the air up into as many layers as possible. The device was worked out so that six blankets of air are created in a manner which prevents the formation of a single mass of

Mr. Kurth attributes this phe-

#### "Listen Boss—



to

n

ne nd e:

Here's How You Can Get TRAINED Men"

U.E.I. Free Placement Bureau will put you in touch with a trained, competent worker. U.E.I. trained men have cod as shop mechanics, installation wice men in this industry for 12 This service is Free to you and two employee. Try it.

UTILITIES ENGINEERING INSTITUTE Wells St. Established 17 West 60th St. Rinols 1927 New York, N. Y.



Water Coolers — Filters Cafeteria—Industrial Commercial Remote Surge Tanks Pipe Coils Filtrine Mfg. Co., Brooklyn, N.Y.

nomena to "aspiration" which takes place when moving air creates a "friction" with other layers of air. This is not to be confused with "secondary air movement," which is common with any type of air outlet, he stated. It also was necessary, Mr. Kurth related, to work out a device that would be equally effective at various ceiling heights; from 7 up to 17 foot, or even 37 foot, ceilings.

The meeting was opened by G. G. Shackleford, Detroit representative of the company, and the speaker was introduced by Henry Knowlton of AIR CONDITIONING & REFRIGERATION NEWS, who acted as toastmaster.

Application of the Anemostat was discussed in the Nov. 9, 1938 issue

#### March Foreign Shipments Increase Over 1938

WASHINGTON, D. C.-Shipments of air-conditioning equipment abroad showed an appreciable increase during March over figures for the corresponding period of 1938, according to statistics compiled by the machinery division of the Department of Commerce.

March shipments totaled \$268,517, as compared with \$204,927 in the same month last year. Exports of blowers and ventilating equipment amounted to \$187,752, against \$53,430; and ice-making equipment shipments were \$100,557, compared with \$66,065 in March, 1938.

#### G-E Air-Conditioning Dept. **Appoints Newell-Emmett**

NEW YORK CITY-The air-conditioning department of General Electric Co. has announced the appointment of the Newell-Emmett Co., Inc., 40 East 34th St., as its advertising agency for all of the department's automatic heating and air-conditioning products.

#### Knudsen To Manage Carrier's Canadian Activities

TORONTO, Canada - W. Ross Knudsen, formerly with the New York sales division of Carrier Corp., has been appointed manager of Carrier Corp. of Canada, Ltd., to succeed C. B. Owens, who has resigned.

Ask for VIRGINIA EXTRA DRY\* ESOTOO V-METH-L \*Available in 5, 10, 35, 70, 100, and 150 lb. cylinders, and in multi-unit tank cars.

VIRGINIA SMELTING COMPANY

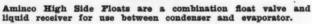
WEST NORFOLK, VIRGINIA

### THE BUYER'S GUIDE



#### HIGH SIDE FLOATS

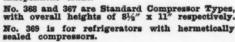




Used extensively in the dairy and ice cream industries in preference to expansion valves. Aminco High Side Floats may be used with "Freon," methyl chloride, or sulphur. Rugged all-steel construction with stainless steel needle and seat. Shells are tested to 250 lbs. pressure and all joints are electric welded.

#### Replacement High Side Floats

For domestic installations we offer a RE-PLACEMENT HIGH SIDE PLOAT service hitherto unavailable to the independent service man and jobber. These floats are equal, in every respect, to the floats they replace, and provide a new source of service revenue for the independent trade.



Send for descriptive circulars. All good jebbers sell Amineo products.

#### AMERICAN INJECTOR COMPANY

DETROIT, MICHIGAN 1481 Fourteenth Avenue Warehouse stocks on Pacific Coast-Van D. Clothier, 1015 E. 16th St., Los Angeles In Canada: Modern Household Appliances, Ltd., 382 Victoria Ave., Westmount, P.Q.



Send for our big catalog. It's FREE TO YOU if you write on your letterhead. We only sell wholesale. You'll find it contains only quality merchandise and complete stocks, too, of all AIR CONDITIONING and REFRIGERATION

PARTS, SUPPLIES and EQUIPMENT

# 1728 S. Michigan Avenue, Chicago, Illinois

3 CHICAGO BRANCHES - NORTH, WEST, SOUTH

NEW YORK 161-163 Grand St.

DETROIT 5013 John R. St.

CLEVELAND 4506 Prospect Ave.

2910 Washington Ave

# Commercial Refrigeration

# Service Complaints on Fountains With Instantaneous Water Cooler Analyzed

Many service problems presented by soda fountains equipped with instantaneous water coolers are unlike those on an ordinary type of fountain. To enable the service man to cope with these difficulties Arch Black and Dean C. Seitz have made a complete analysis of complaints and suggested remedies, the first part of which is contained in this issue.

This is another in the weekly series on installing and servicing soda fountains, frozen foods cases, and counter-type ice cream freezers, appearing regularly in AIR CONDITIONING & REFRIGERATION NEWS.

#### By Arch Black and Dean C. Seitz

Due to the fact that the Bastian-Blessing 1937-1938 dry expansion soda fountain utilizes Frigidaire instantaneous water cooler, which introduces new service problems not previously encountered in this series of articles, a complete analysis of the service complaints which might be encountered by a service engineer will be listed in the next several

There will be some duplication of service complaints and their remedies, for similar complaints and similar remedies have been discussed in earlier articles. However, to keep the record of dry expansion soda fountains using instantaneous coolers complete, the following list of complaints and remedies will be given in

#### (A) Complaint-Water Frozen

#### 1. WATER LEADER LINE IN JAR ENCLOSURE TOUCHES REFRIGERATION LINE

If no water flows from the draught arm when it is opened, the service engineer should first make certain that the shut-off valve located under the draught arm has not been closed. Also check any other water valves which might be installed on the main water supply.

After having definitely ascertained that the water pressures are available at the soda fountain, the exact point of freezing can be determined by the process of elimination.

Crack open by means of a wrench the exit line leading from the water cooler to the draught arm. If the water flows from this open joint, and it will not flow from the draught arm, it is certain that the freeze-up is in the leader line connecting the instantaneous water cooler with the draught arm.

By examining the leader line, it will be found to touch or pass very close to the refrigeration coil of the jar enclosure. This is the point of freeze-up. Thaw it out with warm rags, and, before leaving the installation, rebend the leader line to eliminate a repitition of the trouble.

#### 2. SHORTAGE OF REFRIGERANT

After following the procedure outlined in point 1 above, and finding that the freeze-up is not in the leader line from the instantaneous cooler to the draught arm, it is necessary to crack the inlet water or soda water line to determine whether the freezeup occurs within the inside of the instantaneous cooler itself.

If the water flows when the inlet connection is broken, but not when the outlet connection is broken, it is definitely ascertained that the location of the freeze-up is inside the instantaneous cooler.

There are several possible causes of the freeze-up inside the instantaneous water cooler. The most likely cause is shortage of refrigerant. A slight shortage such as one or two counts causes the water cooler to freeze. Since this is not a technical engineering article but rather a service engineering article, the technical discussion of the cause of this type of freeze-up will not be given in detail. For the sake of the technically minded service engineers it should be merely necessary to add that the freeze-up is due to the Law of Partial Pressures.

If there is a liquid line sight gauge glass installed in the liquid line the shortage can be definitely seen by the service engineer. If the sight glass is not installed, the service engineer can determine the shortage by listening to the prolonged hissing of the expansion valve, and by feeling the temperature of the liquid line entering the instantaneous cooler.

If the liquid line leading to the cooler is felt with a hand on the outside of the creamer unit, it will be appreciably cooler than the room temperature. This will indicate that an expansion of the liquid has taken place inside the liquid line itself.

The remedy is to add refrigerant until the liquid sight glass no longer "flashes" or until the expansion valve no longer hisses for extended periods. Before leaving the installation, carefully check over the entire liquid and suction line with a halide torch in order to locate and correct the source of the leak which caused the shortage.

#### 3. BOTTLE STORAGE COMPARTMENT BELOW THE FREEZING POINT

This complaint may be given to the service engineer as a frozen water complaint, although if there are any bottles in the bottle storage compartment, they will likewise be frozen, and these may be the basis of the complaint. If the bottle storage compartment is held under the freezing point for an overnight period, the instantaneous water cooler may be frozen from the exterior. Determine accurately the temperature on the compartment. If it is under the freezing point, either the expansion valve is open too wide or the cutout on the condensing unit is entirely too low.

First check the cut-out point of the condensing unit low pressure switch. It should be no lower than 3 to 5 inches of vacuum. Then adjust the expansion valve by the frost line method until the frost stops at the bulb of the thermostatic expansion bulb. As an alternate the location of the bulb of the thermostatic expansion valve on the jar enclosure refrigeration circuit may be changed. It may be moved to the top of the refrigeration coil in the jar enclosure,

than

years

secret

Wash

ASSOC

Ma

when

and s to 392

period

1937, of 19

last o

first

30,517

Ma

11,607

March

Mo

CL

sales

May,

to 11

in Ma

secret

Hot

Extreme care must be taken to see that the capillary line does not touch any cold refrigeration line as it leads into the jar enclosure. It should preferably be insulated with a rubber hose, of the sponge rubber type. This latter method of correcting the trouble by removing the bulb of the thermostatic expansion valve should be resorted to only after the other means of correcting the trouble have failed.

#### 4. LEAKY TEMPERATURE REGULATING VALVE (LTV-20)

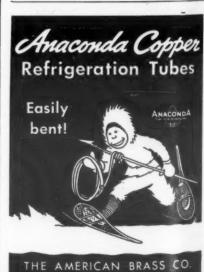
A chip or filing may get caught under the valve seat, in which case the valve may leak and cause a freeze-up. The remedy is to remove the seat of the valve and replace it with a new one.

By using the Frigidaire gauge adaptor valve (Frigidaire Part No. 1122203) which attaches to the instantaneous cooler at the point where the suction line leaves the cooler, the service engineer will be able to read the pressure inside the cooler. At no time should the pressure inside the cooler be lower than 32 lbs. when "Freon-12" is used as the refrigerant. If the LTV-20 valve leaks, this point can be definitely determined by installing a special gauge valve and watching the pressure gradually reduce below the 32-lb, deadline.

#### 5. LTV-20 VALVE ADJUSTED TOO COLD

The pressure and consequently the temperature adjustment of the instantaneous water cooler is obtained by turning the small adjusting screw on the extreme top of the valve. This screw is held in position by a lock nut which must first be loosened before an adjustment can be made. By turning the adjusting nut in or clockwise, the exit water temperature is raised, by turning the adjusting nut screw out or counter-clockwise, the exit water temperature is lowered.

In the case of a temperature regulating valve (LTV-20) which has its minimum setting fixed at 30 lbs. in place of 32 lbs., the water will freeze whenever the adjusting screw is turned completely out, but will not freeze with the adjusting screw turned in or clockwise by two revolutions. Although this possible complaint will be very rare, nevertheless, its possibility may not be overlooked.

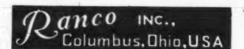


FRENCH SMALL TUBE BRANCE



#### RJS-830 Ask for SINGLE DIAL CONTROL Replacement

There are plenty of places where this Ranco General Replacement is just what is needed. It fits practically all Single Dial Household Refrigerator applications - - it is easy to install - and it sells at a very modest price. Made of stainless steel -typical Ranco quality throughout. Order from your nearest jobber - - R J S - 830.



#### Washer Shipments Set Two Year Record

r than

adjust

st line

at the ansion

tion of

expan-

re re-

anged.

of the

losure.

cen to

es not ine as

re. It

with a

orrect-

e bulb

valve

er the

EE

/-20)

aught

case

use a

emove ace it

gauge

t No.

ne in-

where

r, the

At no e the

when

erant

point

y in-

lually

ED

y the

e inained

crew

by a nade. n or

pera-

justlock-

re is

egu s its

eeze v is

not

crew

volu

less ked.

and

read

the

CHICAGO-More household washer shipments were reported in March than in any month for almost two years, says J. R. Bohnen, executive secretary and treasurer of American Washer & Ironer Manufacturers' Association.

March total of 152,725 units was the best record since May, 1937, when 160,246 units were shipped, and swelled 1939's first quarter total to 392,519 shipments. This figure is the highest for any three-month period since the third quarter of 1937, being 38% over the first quarter of 1938 and 47% greater than the last quarter of that year.

Household ironers shipped in the first quarter of the current year totaled 27,831, as compared with 30,517 in the same period of 1938, and 27,959 in the last quarter of the same year.

March shipments of ironers totaled 11,607, an 8% increase over the March, 1938 figure of 10,727.

#### March Cleaner Sales High

CLEVELAND — Vacuum cleaner sales for March were greatest since May, 1937, totaling 152,255 compared to 112,322 in February and 141,334 in March, 1938, reports C. G. Frantz. secretary of the Vacuum Cleaner Manufacturers' Association.







# Air-Conditioning Installations For '38 & Previous Years Shown In Surveys

(Data Supplied by Monongahela West Penn Public Service Co.)

#### Parkersburg, W. Va.

| Name and Type of Business            | Manufacturer     | Hp.  |
|--------------------------------------|------------------|------|
| J. S. Broida (Department Store)      | York             | 18.0 |
| The Style Center (Dress Shop)        | Airtemp          | 9.0  |
| Burwell Theater (Theater)            | Carrier          | 25.0 |
| Chancellor Hotel (Office)            | Westinghouse     | 9.0  |
| Walter C. Hardy Co. (Brokers)        |                  | 9.0  |
| Comm. Savings & Loan (Bank)          | Westinghouse     | 9.0  |
| C. A. Ludey (Residence)              |                  | 1.0  |
| Monongahela System (Appliance Store) | York             | 12.0 |
| Wilmar Restaurant (Restaurant)       |                  | 6.0  |
| Murphy Cafe (Marietta) (Cafe)        | York             | 9.0  |
| Clarksbu                             | gh, W. Va.       |      |
| Rosenbergs (Dress Shop)              | Carrier          | 5.0  |
| Elks Club (Club)                     | Carrier          | 12.0 |
| El Dora Beauty Shop (Beauty Shop)    | York             | 6.0  |
| Fairmo                               | nt, W. Va.       |      |
| Elks Club (Club)                     |                  | 12.0 |
| Owens-Illinois Glass Co. (Factory)   | York             | 12.0 |
| Owens-Illinois Glass Co. (Factory)   | York             | 2.5  |
| Luella Fisher (Residence)            | Frigidaire       | 0.7  |
| Morganto                             | wn, W. Va.       |      |
| Fashion Shop (Dress Shop)            | Delco-Frigidaire | 3.5  |
| Dr. Earl McCune (Office)             | Delco-Frigidaire | 2.0  |
| Dr. Sam Cole (Office)                |                  | 3.5  |
| Dr. C. T. Thompson (Office)          |                  | 3.5  |
| Dr. H. W. Cozad (Office)             |                  | 1.0  |
| Dr. John Trotter (Office)            |                  | 0.7  |
| Finns Quality Shop (Dress Shop)      |                  | 1.0  |
| Rand Drug Store (Drug Store)         |                  | 7.0  |
| Pan                                  | handle           |      |

Dr. E. F. Crouse—Wellsburg (Office)...... Airtemp W. E. Douglass—Wellsburg (Residence)... Delco-Frigidaire

Cove Theater-Weirton (Theater) ...... Delco-Frigidaire (Water)

#### Atlanta, Ga.

|                            |     | ipplied b      |     |                |     |                | -   | otal     |
|----------------------------|-----|----------------|-----|----------------|-----|----------------|-----|----------|
| Classification             | No. | to 1937<br>Hp. | No. | ng 1937<br>Hp. | No. | ng 1938<br>Hp. | No. | Нр.      |
| Art Studios                | 0   | 0.0            | 2   | 4.75           | 1   | 0.5            | 3   | 5.25     |
| Barber Shops               | 0   | 0.0            | 1   | 5.5            | 0   | 0.0            | 1   | 5.5      |
| Banks                      |     | 33.16          | 4   | 58.25          | 4   | 378.67         | 11  | 470.08   |
| Beauty Shops               | 2   | 8.1            | 3   | 27.75          | 0   | 0.0            | 5   | 35.85    |
| Bowling Alley              | 0   | 0.0            | 0   | 0.0            | 1   | 5.75           | 1   | 5.78     |
| Candy Mfg                  | 1   | 3.05           | 0   | 0.0            | 2   | 6.75           | 3   | 9.8      |
| Clothing Stores            | 0   | 0.0            | 5   | 272.67         | 0   | 0.0            | 5   | 272.67   |
| Department Stores          | 4   | 1,707.66       | 2   | 290.0          | 1   | 38.0           | 7   | 2,035.66 |
| Dress Shops                | 3   | 19.88          | 9   | 88.42          | 4   | 26.75          | 16  | 135.08   |
| Drug Stores                | 3   | 56.0           | 4   | 59.25          | 1   | 10.75          | 8   | 70.56    |
| Exhibit                    | 1   | 25.0           | 0   | 0.0            | 0   | 0.0            | 1   | 25.0     |
| 5 & 10¢ Stores             | 3   | 445.83         | 9   | 706.0          | 2   | 210.0          | 14  | 1,361.88 |
| Funeral Parlors            | 1   | 10.0           | 0   | 0.0            | 0   | 0.0            | 1   | 10.0     |
| Fur Shops                  | 1   | 21.5           | 3   | 11.0           | 0   | 0.0            | 4   | 32.5     |
| Haberdasheries             | 3   | 25.5           | 0   | 0.0            | 1   | 37.17          | 4   | 62.67    |
| Hospitals                  | 0   | 0.0            | 2   | 38.0           | 2   | 16.83          | 4   | 54.83    |
| Hotel Dining and           |     |                |     |                |     |                |     |          |
| Cocktail Rooms             | 4   | 54.37          | 6   | 144.7          | 1   | 79.0           | 11  | 278.07   |
| Hotel Sleeping Room        | 1   | 22.0           | 0   | 0.0            | 0   | 0.0            | 1   | 22.0     |
| Industrial Cooling         | 2   | 20.0           | 1   | 30.0           | 2   | 136.25         | 5   | 186.28   |
| Jewelry Stores             | 2   | 10.25          | 3   | 34.38          | 2   | 19.25          | 7   | 633:88   |
| Market Space               | 1   | 8.0            | 0   | 0.0            | 0   | 0.0            | 1   | 8.0      |
| Office Buildings           | 0   | 0.0            | 3   | 900.21         | 1   | 57.0           | 4   | 957.21   |
| Opticians                  | 3   | 9.75           | 3   | 13.57          | 1   | 0.75           | 7   | 24.07    |
| Printing Establishment     | 1   | 0.55           | 0   | 0.0            | 0   | 0.0            | 1   | 0.55     |
| Private Offices            | 38  | 166.6          | 35  | 259.49         | 14  | 116.28         | 87  | 542.37   |
| Radio Studios              | 1   | 2.5            | 2   | 24.16          | 1   | 3.0            | 4   | 29.66    |
| Residences                 | 14  | 28.4           | -24 | 55.08          | 6   | 39.45          | 44  | 122.93   |
| Restaurants                | 5   | 69.0           | 2   | 25.5           | 4   | 90.25          | 11  | 184.75   |
| Shoe Stores                | 3   | 27.25          | 4   | 14.66          | 3   | 20.0           | 10  | 61.91    |
| Theaters                   | 4   | 152.75         | 4   | 137.0          | 2   | 216.17         | 10  | 505.92   |
| Liquor Store               | 0   | 0.0            | 0   | 0.0            | 1   | 3.0            | 1   | 3.0      |
| Miscellaneous              | 0   | 0.0            | 0   | 0.0            | 1   | 8.5            | 1   | 8.5      |
| Total*                     | 104 | 2,927.1        | 131 | 3,200.34       | 58  | 1,520.07       | 293 | 7,647.51 |
| *Federal Gov. not included | 2   | 23.0           | 1   | 63.25          | 0   | 0.0            | 3   | 86.25    |

#### Cedar Rapids, lowa

| count itapias,    |     |                    |     |                    |     |               |     |          |
|-------------------|-----|--------------------|-----|--------------------|-----|---------------|-----|----------|
|                   |     | by Iowa<br>to 1937 |     | ric Ligi<br>g 1937 |     | ower Cog 1938 |     | otal     |
| Classification    | No. | Hp.                | No. | Hp.                | No. | Hp.           | No. | Hp.      |
| Theaters          | 2   | 290.0              | 1   | 40.0               | 2   | 36.0          | 5   | 366.0    |
| Industrial        | 1   | 22.0               | 1   | 3.5                | 0   | 0.0           | 2   | 25.5     |
| Utility Co        | 1   | 7.0                | 1   | 30.0               | 0   | 0.0           | 2   | 37.0     |
| Residences        | 12  | 32.15              | 2   | 6.5                | 2   | 1.5           | 16  | 40.15    |
| Funeral Parlors   | 1   | 4.25               | 0   | 0.0                | 3   | 10.0          | 4   | 14.25    |
| Stores            | 12  | 191.0              | 10  | 123.5              | 5   | 19.25         | 27  | 333.75   |
| Restaurants       | 7   | 108.5              | 1   | 11.0               | 1   | 10.5          | 9   | 130.0    |
| Offices           | 4   | 49.5               | 3   | 46.0               | 2   | 6.25          | 9   | 101.75   |
| Hotels            | 1   | 10.0               | 1   | 50.0               | 0   | 0.0           | 2   | 60.0     |
| Laboratory        | 1   | 2.0                | 0   | 0.0                | 0   | 0.0           | 1   | 2.0      |
| Studio            | -   | 0.0                | 1   | 3.5                | 0   | 0.0           | 1   | 3.5      |
| Newspapers        | 0   | 0.0                | 0   | 0.0                | 3   | 71.0          | 3   | 71.0     |
| Card Room         | 0   | 0.0                | 0   | 0.0                | 1   | 3.25          | 1   | 3.25     |
| Department Stores | 0   | 0.0                | 0   | 0.0                | 2   | 72.0          | 2   | 72.0     |
| Total             | 42  | 716.4              | 21. | 314.0              | 21  | 229.75        | 84  | 1,290.15 |

# The NEW KOCH

DISPLAY CASE

Territory Open for Alert Distributors



A completely new display case of welded steel construction. Porcelain clad. Lined with porcelain and stainless steel. Four inch insulation. American Royal cases are only part of the extensive KOCH line, which includes display cases in every price class for any store in any climate.

Kefrigerators

#### New Dehumidifying Equipment Using Silica Gel Is Demonstrated By Bryant Heater Co.

CLEVELAND — Demonstration of Bryant Heater Co.'s new Silica Gel dehumidifying equipment recently was conducted for air-conditioning engineers and gas industry officials at the company's laboratories here.

With about fifty people present, a room was heated to 95° F. with a moisture content of 135 grains per pound of air. The new Bryant unit was started, and in less than 20 minutes, it is claimed, the moisture was reduced to 50 grains per pound and the temperature to 72°.

Lyle C. Harvey, president of the Bryant firm, and C. F. Cushing, manager of air-conditioning sales, conducted the demonstration and explained with charts the economics

8.0

and mechanics of the new machine.

Cooling was accomplished by the evaporation of water into the dry air

produced by the dehumidifier.

This partial re-saturation was effected in a new re-saturating spray cooler developed by Bryant concurrently with the new dry air machine.

Present plans call for the production of the dehumidifiers in three sizes: 600, 1,300, and 2,700 c.f.m. of air capacities. Silica Gel adsorbent material is carried in a cylindrical basket continuously turning. Both conditioned and heated air streams are continuous and simultaneous in Dividing seals inside the cylinder separate the two air streams.

#### THE BUYER'S GUIDE





 The rapid growth and increasing demand for Cold Storage Food Locker Plants afford new and unusual sales opportunities for dealers and service men all over the country.

A-S-E Froz-n-Food Lockers are specially designed and constructed to meet all cold storage locker plant requirements. There is a size, type and arrangement for every need and budget. More than 26 years of quality building experience is assurance of extra years of satisfactory, trouble-free service.

Let A.S.E Froz-n-Food Lockers increase your profits. Write for descriptive literature and complete information today.



ALL-STEEL-EQUIP COMPANY Incorporated

1510 Kensington Avenue

Aurora, Illinois



#### THE BUYER'S GUIDE

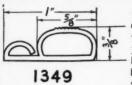


MAN WANTED to Sell This Profitable Action-Air System in Your Territory

Get the exclusive sales rights to this fast-selling Action Air System which solves air circulation problems in coolers. One easy demonstration convinces customers that Action Air prevents dead air spots, freezing zones, humidity difficulties and excessive frosting. It pays for itself by reducing shrinkage and spoilage, by saving operating expenses and electricity. Easy to sell, creates new customers and repeat business. Long list of satisfied users. Be the only dealer in your territory to sell these machines. Write today for money-making

THE BROWN CORP., 652 Bellevue Ave., Syracuse, N.Y. money-mak proposition

### REFRIGERATOR DOOR GASKETS



Many types in molded and extruded rubber available for replacement use. Ask your jobber for copy of bulletin listing complete line. Manufacturers-let us work from your Blueprints.

1761

General Offices 420 North La Salle Street CHICAGO





# WRITE FOR CATALOG

Pressure Sealed DEHYDRA-TECTOR

A combination dryer with liquid indica-Gas bubbles passing under sight port glass indicate refrigerant shortage. Vacuum dried and pressure sealed. Choice of 5 dehydrants.

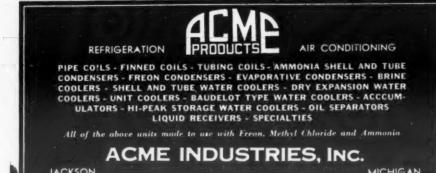
HENRY VALVE CO. CHICAGO, ILLINOIS



Can Tecumseh supply your needs?

Yesl Ask our present jobber and manufacturing customers.

TECUMSEH PRODUCTS CO., TECUMSEH, MICH. Canadian distributor: Befrigeration Supplies Co., Ltd., London, Ontario





# ELECTRIC WATER COOLERS

Thoroughly reinforced all steel attractively finished cabinets. Complete line of different Models and Capacities. Write for details and sales prices.

Puro Filter Corporation of America Spring 7-1900 440 Lafayette Street, New York City

ATTENTION REFRIGERATION AND APPLIANCE DEALERS

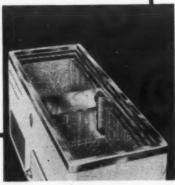
A-BLIZZARD-FROM-THE-WEST-That has everthing

More Loose Labels

**Has More Capacity** 

Territories Now Open \* Write for Particulars

WEBER SHOWCASE & FIXTURE CO., INC. 5700 Avalen Boulevard . Cable "Weberco"



# 25,655 Commercial Refrigeration Units Sold To Distributors **During March By 16 Companies In Nema Organization**

The following report of commercial refrigerating equipment sales for March, 1939 was made to the Commercial Refrigeration Section of the National Electrical Manufacturers Association (Nema) by the following

16 companies: Baker Ice Machine Co., Inc., Brunner Mfg. Co., Carrier Corp., Crosley Corp., Frigidaire Div. General Motors Corp., General Electric Co., Gibson Electric Refrigerator Co., Kelvinator

Div. Nash-Kelvinator Corp., Merchant & Evans Co., Norge Div. Borg-Warner Corp., Servel, Inc., Uniflow Mfg. Co., Universal Cooler Corp., Vilter Mfg. Co., Westinghouse Electric & Mfg. Co., and York Lo. Machinery Corp. and York Ice Machinery Corp.

Virg

Se

WES smeltir

rangem

Co., Ne

Virgini.

supply

throug

nels, th

ing age

tured

billed the fir to \$68

086,55

Gerard

holder

annual

Prof

amour

share

compa a sha

year,

Sp

PEN

| SALES FOR MARCH, 1939  | Dom<br>Quantity | Value     |      | adian    | Other Fo | Value   | Total  | World    |
|--|-----------------|-----------|------|----------|----------|---------|--------|----------|
|  | •               |           |      |          |          |         |        | valu     |
| 1. Bottle Water Coolers—Complete   |                 | 18,450    |      | \$ 550   | 33 \$    |         | 326 \$ | 21,15    |
| 2. Pressure Water Coolers—Complete   | 1,498           | 148,571   |      | 256      | 71       | 7,299   | 1,572  | 156,12   |
| 3. Water Coolers—Low Side Only   |                 | 8,848     |      | ****     | 12       | 813     | 106    | 9,66     |
| 4. Ice Cream Cabinets—Complete   | 4,165           | 650,795   |      | 17,847   | 150      | 19,599  | 4,433  | 688,24   |
| 5. Ice Cream Holding Cabinets Only (Remote)  | 331             | 42,759    | 2    | 235      | 18       | 2,330   | 351    | 45,32    |
| 6. Bottle Beverage Coolers—Complete  | 4,044           | 417,386   |      | 4,556    | 97       | 10,347  | 4,196  | 432,28   |
| 7. Beverage Coolers (No High Sides)  |                 | 5,367     |      |          |          |         | 56     | 5,36     |
| 8. Milk Coolers—Complete   |                 | 5,397     |      |          | 1        | 99      | 33     | 5,49     |
| 9. Milk Cooling Cabinets (No High Sides) 10. Commercial Evaporators—Not Reported Above | 1               | 69        | **** |          |          |         | 1      | 6        |
| (Including Cold Diffusers, Brine, and Other Spray Evaporators, Etc.)                   | 2,953           | 133,346   | 308  | 7,745    | 669      | 25,238  | 3,930  | 166,32   |
| 11. Condensing Units Less Than 1/3 Hp  | 1,927           | 88,731    | 21   | 1,269    | 500      | 24,548  | 2,448  | 114,548  |
| 2. Condensing Units—1/3 Hp   | 3,253           | 200,273   |      | 4,006    | 535      | 37,530  | 3,840  | 241,80   |
| 3. Condensing Units—½ Hp   | 1,523           | 130,339   | 43   | 4.071    | 280      | 25,128  | 1,846  | 159,53   |
| 4. Condensing Units—¾ Hp   | 843             | 97,577    | 28   | 3,401    | 207      | 19,478  | 1,078  | 120,45   |
| 5. Condensing Units—1 Hp   | 469             | 64,803    | 17   | 2,499    | 108      | 15,235  | 594    | 82,53    |
| 16. Condensing Units—1½ Hp   | 296             | 52,994    | 9    | 1,601    | 55       | 9,937   | 360    | 64,53    |
| 17. Condensing Units—2 Hp  | 168             | 34,891    | 1    | 185      | 20       | 4,588   | 189    | 39,66    |
| 18. Condensing Units-3 Hp  | 118             | 29,402    | 4    | 1,029    | 29       | 6,737   | 151    | 37,16    |
| 19. Condensing Units-5 Hp  | 49              | 20,104    |      |          | 2        | 537     | 51     | 20,64    |
| 20. Condensing Units—7½ Hp   | 20              | 11,984    |      |          | 2        | 746     | 22     | 12,73    |
| 21. Condensing Units—10 Hp   | 44              | 28,275    |      |          | 1        | 800     | 45     | 29,07    |
| 2. Condensing Units—15 Hp  | 9               | 7,439     |      |          | 1        | 1,069   | 10     | 8,500    |
| 3. Condensing Units—20 Hp  | 5               | 5,338     |      |          |          |         | 5      | 5,338    |
| 4. Condensing Units—25 Hp  |                 |           |      |          |          |         |        | ***      |
| 5. Condensing Units-30 Hp  | 2               | 2,639     |      |          |          |         | 2      | 2,63     |
| 6. Condensing Units-40 Hp  |                 |           |      |          |          |         |        |          |
| 7. Condensing Units—50 Hp  | 10              | 12,500    |      |          |          |         | 10     | 12,50    |
| 8. Total—All Condensing Units (11 to 27)   | 8,736           | 787,289   | 175  | 18,061   | 1,740    | 146,333 | 10,651 | 951,683  |
| 9a. Condensers—Sold Separately   |                 |           |      |          | 0-       |         |        |          |
| Shell & Coil or Shell & Tube   | 1               | 100       |      |          |          |         | 1      | 100      |
| 9b. Evaporative Type   | 16              | 8,138     |      |          |          |         | 16     | 8,138    |
| 0. Total All Commercial Refrigeration  | \$2             | 2,226,515 |      | \$49,250 | \$       | 214,215 | \$2    | ,489,980 |

#### N. Y. Retailers Quizzed On Television Selling; **Majority Interested**

NEW YORK CITY-Returns from questionnaire sent to radio retailers in the metropolitan area by General Electric Co. and Bruno-New York, Inc. have indicated that the majority of such dealers want to merchandise television receivers, reports D. W. May, G-E's district radio manager, and Irving Sarnoff of the Bruno organization.

Both surveys questioned dealers as to their location, provisions for demonstration rooms, and facilities for service.

In regard to location, they were asked if they could see the Empire State building from the roof of their stores, if their stores were near trolley lines or thoroughfares heavily traveled by automobiles and trucks, and if there were any restrictions which would prevent them from erecting receiving antennas on the roofs of the buildings in which their stores are located.

Demonstration rooms, the questionnaire pointed out, must be well darkened if the television sets are to be demonstrated to best advantage The Bruno-New York query further qualified this by stating that "such a room should have the light regulated so that there is just enough indirect light to distinguish objects in the room." It also was made clear that the room should be well ventilated.

Expense of television servicing was brought plainly to the dealers' attention by questions asking whether or not they were "ready, willing, and able" to invest approximately \$300 to \$350 in servicing tools and equipment, and to pay for sending their service men to special schools on television servicing.

#### Moody Joins Sales Dept. Of Wolverine Tube

DETROIT-R. F. Moody, for the past two years a member of the development department of Carrier Corp., Syracuse, N. Y., engaged in research on oil burner and residential air conditioning, has joined the sales department of Wolverine Tube Co., it was announced.

Prior to joining Carrier, Mr. Moody spent one and one-half years at Washington University, St. Louis, doing graduate work in physics, during which time he lectured, as a member of the faculty, and engaged in special laboratory research.

#### Globe American Corp. Elects Pierre Miles Vice President

KOKOMO, Ind.-Pierre L. Miles has been elected vice president of Globe American Corp., according to an announcement by Alden Chester, vice president and general manager of that company. Mr. Miles will maintain sales

offices in the Civic Opera building, Chicago, for the purpose of marketing throughout the United States a new line of electric ranges which the Globe American Corp. will produce in its factory here.

A veteran in the development of electric cooking and water heating, Mr. Miles has resigned from the board of directors of the A. J. Lindemann & Hoverson Co. of Milwaukee. Formerly general sales manager of Edison General Electric Appliance Co., Inc., he was identified with the Hotpoint line of ranges and water heaters for many years. More recently he was sales manager of similar products for Nash-Kelvinator Corp., Detroit.

#### Rose Named Manager Of Hotpoint Factories

CHICAGO-Appointment of I. A. Rose as factory works manager of the Edison General Electric Appliance Co., Inc., maker of Hotpoint appliances, has been announced by A. D. Byler, vice president and general manager.

Mr. Rose has been with the company since 1922, and for the past two years has been director of purchases and production. His new duties will include supervision of manufacturing operations for the company's range, water heater, and dishwasher factories in Chicago, Cicero, Ill., and Chattanooga, Tenn. He will make his headquarters at the company's main plant in Chicago, Mr. Byler said.

#### Steinko Leaves Leonard For Agency Post

DETROIT-J. Truman Steinko, formerly advertising and sales promotion manager for the Leonard division of Nash-Kelvinator Corp., has resigned to become an account executive for Ketchum, MacLeod & Grove, Inc., Pittsburgh advertising

No successor to his post with Leonard has as yet been named.

### BUNDY TUBING

Copper-Brazed Steel. Copper Coated Inside and Out. Sizes: "" to " O.D. BUNDY TUBING CO., DETROIT







#### MASTERCRAFT

ADJUSTABLE PAD AND CARRYING HARNESS The most efficient and economical equipment mode for handling refrigerators safely and withest scratching or marring. Pad is separate from harness and both adjustable to all styles and sizes of cabinets.



Efficient, sturdy, easily and quickly applied. Adjustable Pad. \$8.30 each Adjustable Harness,

R

36.00 each
Name of refrigerator attractively lettered
on pad at 50¢ extraf.o.b. Chicago. Write for folder and prices on pads for refrig-erators, washers, ironers, ranges, radios, etc.

Pat. Appl'd for BEARSE MANUFACTURING CO.
3815-3826 Cortland Street, Chicago, Tilinois
Incorporated 1921

#### Virginia Smelting To Sell 'Thawzone A'

tors

**Ierchant** 

-Warner

Ifg. Co.

Mfg. Co.

World

Value

21,157

9,661

156.126

688,241

45,324

432,289

5,367

5,496

166,329

114,548

241,809

159,538

120,456

82,537

64,532

39,664

37,168

20,641

12,730

29,075

8,508

5,338

2,639

12,500

951,683

100

8,138

489,980

IG

OIT

O R

sizes

T

made thous from and nets. and lied. Pad. each

each frigtracred

go. oldirigers. ges.

0.

WEST NORFOLK, Va.—Virginia Smelting Co. has completed an arrangement with Highside Chemicals Co., Newark, N. J., under which the Virginia Smelting organization will supply to the refrigeration trade, through its regular distribution channels, the new "Thawzone" liquid drying agent and acid remover manufactured by the Highside company.

# G-E Billings Increase 5% In First Quarter

schenectady, N. Y.—Sales billed by General Electric Co. during the first quarter of 1939 amounted to \$68,537,269, compared with \$65,086,557 during the same quarter last year, an increase of 5%, President Gerard Swope announced to stockholders of the company at their annual meeting here.

Profit available for dividends amounted to \$7,373,431, or 26 cents a share for the first quarter this year, compared with \$7,075,739 or 25 cents a share for the first quarter last year, an increase of 4%.

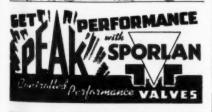
Specify PENN
AUTOMATIC CONTROLS AND SWITCHES
FOR RECOGNIZED RELIABILITY
Write for Catalog
PENN ELECTRIC SWITCH CO.
GOSHEN, INDIANA





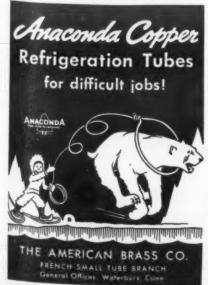
A Dehydrator that is really Dry. Mueller Brass Co. Dri-Drier.

MUELLER BRASS CO. Port Huron, Mich.









#### Association Strives To Keep Dealers Solvent

ROCHESTER, N. Y.—Keeping the appliance dealers of this city in good financial condition and giving the public easy terms on merchandise at low interest rates is an important part of the cooperative program of the Electrical Association of Rochester, Inc., reports E. J. Kramer, secretary-manager.

Basis of the association's financing plan is an arrangement with the Lincoln Alliance Bank & Trust Co., which supplies money for loans, and the Rochester Gas & Electric Co., which passes on all credit extended by the association.

Dealers and distributors who operate under the plan are approved by the finance committee of the association, which consists of two dealers, one distributor, one man from the Rochester Gas & Electric Co., and Mr. Kramer.

Once the dealer has been approved, he is entitled to use the non-recourse finance plan arranged by the association. Under this plan, appliances are sold on a 5.26% bank interest basis (the rate was recently reduced from 5.84%), and only 2% of each sale is "held back" by the financing organization.

At the end of each year, the association holds a dinner, at which all dealers and distributors operating under the plan are given their 2% "hold back" plus an additional 1% bonus—a total of 3% of the instalment paper filed during the year.

All retail credit is approved by the credit department of the Rochester Gas & Electric Co. Instalment payments are not added to the customer's utility bills, but all collecting is handled through the facilities of the Lincoln Alliance Bank and its nine branches.

Floor plan paper is handled on the basis of  $2\frac{1}{2}\%$  interest for a three-month period, Mr. Kramer reports.

Success of the plan is best indicated by actual results obtained. Out of \$2,525,339.30 worth of instalment contracts handled in the past year, losses amounted to only \$12,074.10, Mr. Kramer states.

Dealers are not permitted to use premiums and other "unhealthy" methods to sell appliances, Mr. Kramer states. According to the records of the association, all dealers and distributors have remained solvent during the past few years, and no trouble has been experienced with dealers going out of business.

Under the Rochester plan, appliances are sold on the basis of a \$5 down payment on amounts up to \$150, and \$10 down payment on all amounts running higher. Minimum payments are scheduled at \$3, \$4, and \$5 per month, on the basis of 36-month maximum contracts. Radio contracts are held between 12 and 18 months, with \$5 minimum monthly payment required.

On vacuum cleaners, radios, and laundry equipment, three consecutive payments must have been received by the lending agency before paper becomes "non-recourse" to the dealer. All other paper is "non-recourse" at the time of sale.

The low interest rates, low down payments, and other aspects of the plan have done much to create a favorable volume of business for the industry locally, Mr. Kramer believes.

#### 'Scientific' Hamper For Laundries Designed

CHICAGO—A new laundry hamper, designed by Harry E. Warren, sales manager of Hotpoint's home laundry division, and L. R. Russell, in charge of advertising for the company's washers and ironers, is being made available to retailers of Hotpoint home laundry equipment.

Measuring 33 inches high and 13½ inches square, the hamper has a body of white wicker material and a top of smooth, marbleized Pearliwick. Air may circulate through the wicker sides and also up through the hamper's bottom, which is completely open and raised from the floor. A deodorizing compound is permanently fastened inside the hamper cover.

A fishnet-type laundry bag hangs inside the wicker frame, being held in position by tabs and snaps around the rim of the hamper body. This washable bag is equipped with a heavy drawstring so that it may be removed from the hamper, closed up, and deposited (clothes and all) in the laundry, while another bag is hung in the hamper to receive the next load.

#### CLASSIFIED ADVERTISING

RATES: Fifty words or less in 6-point light-face type only, one insertion, \$2.00, additional words, four cents each. Three consecutive insertions \$5.00, additional words ten cents each.

PAYMENT in advance is required for advertising in this column.

REPLIES to advertisements with Box No. should be addressed to Air Conditioning & Refrigeration News, 5229 Cass Ave., Detroit, Mich.

#### POSITIONS WANTED

PRODUCT MANAGER or Manufacturer's Representative available. Capable of taking complete charge of electrical appliance department. Ten years' experience—organizing—dealer contact—service—ware-housing—policy and procedure. Have had considerable contact with utilities and conducted numerous service courses for dealer personnel. Box 1149, Air Conditioning & Refrigeration News.

YOUNG SERVICE Engineer, 23 years old, desires position with chance for advancement. R.A.C.I. graduate. Six years' experience in commercial refrigeration at servicing, installing, selling and estimating. Can handle any type machine. Ammonia machines a specialty. Also two years' experience as manager of small service business. Can furnish car and tools. Willing to travel anywhere. Would prefer western coast. Box 1150, Air Conditioning & Refrigeration News.

#### ENGINEERING SERVICE

REGISTERED CONSULTING Engineer with twenty years' experience designing and developing heating, refrigerating, and air-conditioning equipment and systems. Complete staff of experts and laboratory available for designing and developing products or laying out systems. Will furnish ideas, or work out yours. F. O. JORDAN (ASRE), 2150 Lawrence, Chicago.

CONSULTING ENGINEER. Refrigeration, heating and air conditioning. DELOS P. HEATH, Post Office Box 1473, Detroit, Mich.

#### FRANCHISES AVAILABLE

COMMERCIAL LINE refrigerator display cases, walk-in coolers, and refrigerators; also direct draw, mechanically-cooled beer coolers. Sell with Ehrlich compressors or with any other make. Attractive discounts, also financing arrangements to help sell. 70 years in business. Write for full information. EHRLICH REFRIGERATOR MFG. CO., St. Joseph, Mo.

#### BUSINESS OPPORTUNITY

WILL SELL entire, or lease wholly or in part, either machinery or building and machinery; now in production on line of commercial compressors and condensing units of ½ H.P. to 10 H.P. Six story concrete building, approximately 100,000 sq. ft. floor space, located in midwestern town of 35,000, good labor market. Power, heat and light available, convenient shipping facilities. Other interests require full attention of present owners. Box 1146, Air Conditioning & Refrigeration News.

#### EQUIPMENT FOR SALE

250 BRAND NEW Frigidaire compressors in original cartons, suitable for ¼ and ½ H.P. highsides. Specifications: Frigidaire part No. 1125-312, twin cylinder complete with flywheel; bore—1½", stroke—17/16". Will sell entire lot or substantial portion, but will not sell in single lots. REFRIGERATOR CORPORATION OF AMERICA, 390 Fourth Ave., New York City.

WHILE STOCK Lasts—Brand new highside, complete with ½ H.P. 110 volt A.C. Stewart-Warner hermetic sealed compressors for top or bottom mount refrigerators. Factory tested. Price \$18.00 each F.O.B. Chicago. G. & E. SUPPLY CO., 444 West Grand Ave., Chicago, Illinois.

#### REPAIR SERVICE

MAJESTIC, GRUNOW, General Electric and Westinghouse rebuilding. World's largest rebuilders. Prices \$30.00 with 18 months' guaranty. Parts for Majestics and Grunows. GE floats \$2.95. Westinghouse flapper valves \$1.00. \( \frac{1}{2} \) H.P. Majestic capacitor motors \$3.75. Write for catalog. G & G GENUINE MAJESTIC REFRIGERATOR AND RADIO PARTS SERVICE, 5801 Dickens, Chicago.

CONTROL REPAIR service. Your controls repaired by expert mechanics, with special precision equipment. Supervised by graduate engineers. We stress perfection and dependability before price. One year guarantee on domestic controls. Any bellows operated device repaired. HALECTRIC LABORATORY, 1793 Lakeview Road, Cleveland, Ohio.

#### PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. VAN DEVENTER (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

#### NEW CATALOG

Write for this complete up to date catalog on your letterhead if you are in our trade territory.

# Brass & Copper Sales Co. 2817 Laclede Avenue St. Louis, Missouri

Wholesale Air Conditioning and Refrigeration Supplies and Equipment.

### THE BUYER'S GUIDE

# MILLS

### **COMPRESSORS**

for Commercial Use

Mills Novelty Company • 4100 Fullerton Avenue • Chicago, Illinois

#### MANUFACTURERS ACCLAIM

Units are widely praised by manufacturer and dealer. Eight exclusive engineering improvements, yet they cost no more than ordinary doors. Obtainable in a wide range of sizes for equipping modern refrigerated display cabinet types,

storage and service doors, glazing strips, trim, etc.

Write for new catalog "Ace Hard Rubber Equipment for Refrigerated Display Cases."

American Hard Rubber Co., 11 Mercer St., New York . . . 111 West Washington St., Chicago, Ill. . . . Akron, Ohio.

ACE "LOXIT" PATENTED DOORS

# **REMPE**

FIN COILS and PIPE COILS

for Refrigeration and Air Conditioning

REMPE CO., 340 N. Sacramento Blvd.

**CHICAGO** 

Date......

#### ORDER BLANK

Business News Publishing Co. 5229 Cass Ave., Detroit, Mich., U.S.A. Gentlemen: Please ship the following:

#### AIR CONDITIONING & REFRIGERATION NEWS

Subscription for United States and Possessions, Canada, and Countries in the Pan-American Postal Union:

Postal Union:
One year (52 issues).....\$4.00

☐ Six months (26 issues)....\$2.00
☐ Three months (13 issues)...\$1.00

Three months (13 issues)..\$1.00

Subscription For All Other Countries:

One year (52 issues).....\$6.00

#### HOUSEHOLD SERVICE MANUALS

No. 1. Theories and principles of refrigeration explained in simple terms. 144 pages...\$1.00
 No. 2. Detailed instructions on

proper methods of installing and servicing various types of systems. 128 pages. Price....\$1.00

No. 3. Detailed data on methods of servicing special types of

No. 3. Detailed data on methods of servicing special types of refrigerators. 144 pages...\$1.00

No. 4. Special service information on 12 makes of household electric refrigerators. 136 pages. Price .....\$1.00

#### COMMERCIAL SERVICE MANUALS

No. C-1. The theory and principles of refrigeration presented more completely. 96 pages. \$1.00
 No. C-2. Installation and service methods. Detailed information on commercial units and parts.

112 pages ......\$1.00

No. C-3. Continuation of installation and service methods (valves, controls, motors, etc.).

144 pages .....\$1.00

Manual \$-1. Complete refrigeration and air-conditioning specifications of all makes and models through 1936. Contains data on oil and refrigerant charge, belt size, controls, evaporator, and other parts. 512 pages. Price ......\$2.00

Name .....

Company .....

AIR CONDITIONING MANUALS

No. A-3. Principles of design engineering. Conditions for human comfort, methods of comfort control. 112 pages....\$1.00

No. A-4. Equipment development principles. Methods of developing air-conditioning equipment. 112 pages. Price ......\$1.00

No. A-5. Principles of air-conditioning equipment selection. Performance tables and specifications. 104 pages......\$1.00

No. A-6. Principles of load estimate and equipment selection for all types of installations. 96 pages. Price ..........\$1.00

No. A-7. Application of load estimating and equipment selection principles for domestic and commercial installations. 96 pages. Price .......\$1.00

Manual B-1. For contractors and estimators. Twenty-five typical air-conditioning jobs explained and estimated. 136 pages..\$1.00

#### BUYER'S GUIDE

No. D-6. The new 1939 Refrigeration and Air Conditioning Directory containing listings of all manufacturers of complete refrigeration and air-conditioning equipment, parts, materials, and supplies. Complete listings including names of manufacturers and addresses. 220 pages...\$1.00

Note: The minimum extra charge for each package of books shipped outside the U.S. is 50 cents. Up to six \$1.00 books may be shipped in one package.

Address .....

|   |   |   |   | 1 | D | n | C | 10 | 0 | 80 | 90 | 1 | - | is | ı | 999 |   |  |   | 0 | 4 | 0 | 0 |   |   |   |   |   |   |   |   |     |       |  |   |   |   |   |   |   |   |     |     |  |
|---|---|---|---|---|---|---|---|----|---|----|----|---|---|----|---|-----|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|-------|--|---|---|---|---|---|---|---|-----|-----|--|
| 0 | 0 | 0 | a | 9 | 9 |   |   | 9  |   |    |    | 0 |   |    | • |     | ٠ |  |   |   |   |   |   |   | 0 |   |   |   | 0 |   | 9 | 9 ( |       |  |   | 0 | 0 | • | a | 0 | 0 | 0   | 0 1 |  |
| 0 |   |   |   |   |   |   | 0 | 0  | 9 |    | 0  |   |   | ۰  |   |     |   |  | 0 |   |   |   |   | • | 0 | 0 | • | 9 | • | 9 |   | 9 4 | <br>9 |  | ٠ | 0 | 0 | 0 |   | 9 |   | 9 1 |     |  |



Nore pages this year-188! Over 5700 models...149 makes of ELECTRIC REFRIGERATORS. Also includes America's parade of Washing Machines, Air-conditioners, oil burners, stokers, etc. More makes...more models...more sizes of each type!

188 PACKED-WITH-PROFIT PAGES (pocket size) conveniently, concisely divided into these time-saving listings:

Alphabetical . . . by makes and models.

Comparison chart.

Chart of belt lengths and crosssections.

Numerical . . . group listings by makes and manufacturers' part numbers. Shows how a limited stock covers a multiple number of models.

| Belts for Electric  | Refrigeration Units  | Dea Model |          |
|---|--|-----------|----------|
| MAKE MODEL Mis. Part. No.  LEONARD 5163 5352 5163 1931 4977-C10 5163 1931 4970-L22 5352 | V5843R   V5813R   V | 2 8 0     | NSING UN |

4, 5, 7-E 60, 30 Belts for Electric R Silmer BELTS MAKE NORGE-Continued frigeration Units R-81-8, P-81-8, 1 LTP-123-8-19 Belt Electric Refrigerators, Bottle Coolers, Milk Coolers, Room Beer and W V5691R 573/6 X 1/4 BU-132-H, P-7 Electric Refrigerators, Bottle Coolers, Milk Coolers, Room

Washing Machines and Ironarz Water Pumps Household

Woods B-270-H, P-4 Washing Machines and Ironers • Water Pumps • Woodworking Machines • Gamasal Frantianal Idassampulas Illan 50 x11/4 Washing Machines and moners water rumps wood.

\*\*General Fractional Horsepower Use V5443R 591/4 x 1/4 0. 675-14 48 x11/4 NORGE-ROLLATOR Commercial Units V5441R 41% x % ILAM2F, EILAM2F, ILAF2F, EILAM2F.

New this year! Gilmer Dual Belt Drives for household units are matched and shipped in pairs (sleeved).

GILMERS Give You Silence...No Slipping... Excellent Wear... because of these 5 Famous Gilmer Features:

PERFECT FIT . . . Gilmer Belts are "tailor-made in the grooves", on the world's largest assortment of V-moulds. Every Gilmer Refrigerator Belt is an exact factory duplicate, built by engineers specializing on endless belts for 36 years. Gilmer's perfect fit insures permanent, slip-less silence.

MAXIMUM STRENGTH . . . Every Gilmer Belt is many times as strong as it need be to withstand the maximum load. This guarantees long life. MINIMUM STRETCH... Gilmer's specially processed cords hold stretch,

PERMANENT SILENCE . . . Gilmer Belts, because of their perfect fit and balanced construction, operate silently, without vibration or whip. For certain household models where belt squeak is a common complaint, Gilmer makes a specially treated belt. This is included in the line without extra cost.

FULL BODY . . . Full-bodied Gilmer Belts are made to full width and thickness. They are never skimped. They are sturdy. Gilmer Belts will not turn over in the groove.



MAKE

NORGE





**Gilmer** Gets You Organized to Sell! Armed with "America's Belt Bible", you know the belt that's built for each job; it helps you find the right fit faster; it cuts out all guesswork in service work. But-GILMER doesn't stop there! With GILMER's famous 35-R convenient assortment (including bar, numbers, window sign) you have broad coverage on 56 well-known, widely distributed machines. 35-R assortment makes it possible for you to give good service with a reasonable investment in this limited stock. GILMER's all-steel Counter Catalog Stand (accommodating 8" of catalogs) is designed to speed-up store service. Write for details.

driv

rapio

The

mitte

unsec

prefe value

to the

the p

corpo

to tal

(Con

Fr

CH

been a

Alemi

art-W

Stewa

years.

tising

divisio

of all

until |

Alemi assum later.

Mr.

#### L. H. GILMER COMPANY

under full load, to less than ½ of 1%.

"The Oldest Firm of Rubber Fabric Belt Specialists" Tacony, Philadelphia, Pa.

Please send me the FREE Gilmer Catalog - 1939 Edition

Firm Name.

YOUR GILMER BELT JOBBER always carries full stocks and fills orders fast - just as Gilmer gives

him prompt service!

SEND FOR YOUR 1939 GILMER CATALOG Joday.